API Well Number: 43047534390000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐

APPLICATION FOR PERMIT TO DRILL

1. WELL NAME and NUMBER RW 34-14AGR	
2. TYPE OF WORK DRILL NEW WELL ● REENTER P&A WELL ○ DEEPEN WELL ○	**3. FIELD OR WILDCAT** RED WASH
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO	**5. UNIT or COMMUNITIZATION AGREEMENT NAME** RED WASH
6. NAME OF OPERATOR QEP ENERGY COMPANY	**7. OPERATOR PHONE** 303 308-3068
8. ADDRESS OF OPERATOR 11002 East 17500 South, Vernal, Ut, 84078	**9. OPERATOR E-MAIL** debbie.stanberry@qepres.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU0569	**11. MINERAL OWNERSHIP** FEDERAL ● INDIAN ○ STATE ○ FEE ○
	12. SURFACE OWNERSHIP FEDERAL ● INDIAN ○ STATE ○ FEE ○
13. NAME OF SURFACE OWNER (if box 12 = 'fee')	**14. SURFACE OWNER PHONE (if box 12 = 'fee')**
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')	**16. SURFACE OWNER E-MAIL (if box 12 = 'fee')**
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')	**18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS** YES ○ (Submit Commingling Application) NO ●
	19. SLANT VERTICAL ● DIRECTIONAL ○ HORIZONTAL ○

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	420 FSL 2050 FEL	SWSE	14	7.0 S	22.0 E	S
Top of Uppermost Producing Zone	420 FSL 2050 FEL	SWSE	14	7.0 S	22.0 E	S
At Total Depth	420 FSL 2050 FEL	SWSE	14	7.0 S	22.0 E	S

21. COUNTY UINTAH	**22. DISTANCE TO NEAREST LEASE LINE (Feet)** 420	**23. NUMBER OF ACRES IN DRILLING UNIT** 40
	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1350	**26. PROPOSED DEPTH** MD: 6521 TVD: 6521
27. ELEVATION - GROUND LEVEL 5208	**28. BOND NUMBER** ESB000024	**29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE** 49-251/49-2153

Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Surf	12.25	8.625	0 - 3851	32.0	Unknown	0.0	Halliburton Light , Type Unknown	539	2.89	11.0
							Halliburton Premium , Type Unknown	155	1.49	13.5
Prod	7.875	5.5	0 - 6521	17.0	N-80 LT&C	9.5	Halliburton Light , Type Unknown	264	2.95	11.0
							Halliburton Premium , Type Unknown	335	1.48	13.5

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	☑ COMPLETE DRILLING PLAN
☐ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
☐ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	☑ TOPOGRAPHICAL MAP

NAME Jan Nelson	**TITLE** Permit Agent	**PHONE** 435 781-4331
SIGNATURE	**DATE** 12/19/2012	**EMAIL** jan.nelson@qepres.com

API NUMBER ASSIGNED 43047534390000	**APPROVAL** Permit Manager

RECEIVED: January 08, 2013

QEP Energy Company

RW 34-14AGR
New Vertical Well
Summarized Procedure

1. MIRU.
2. Drill 12 ¼" surface hole to 200', then drill 11" to 3,851'.
3. Run 8 5/8", 32#, HCK-55, LTC casing and cement to surface.
4. NU rig's 3,000 WP rated BOP. Test BOP's and surface casing.
5. PU straight hole BHA, drill out surface casing and 10' of new formation, run FIT.
6. Drill 7 7/8" hole to 6,521'.
7. TOOH, MIRU Loggers.
8. Log from surface casing to TD.
9. RDMO Loggers.
10. TIH, Circulate.
11. TOOH & LDDP.
12. PU and run 5 1/2", 17.0#, N-80, LTC casing to TD, cement casing.
13. ND BOP's.
14. RDMOL.

ONSHORE OIL & GAS ORDER NO. 1
QEP Energy Company
RW 34-14AGR

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. Formation Tops

The estimated tops of important geologic markers are as follows:

Formation	Depth
Uinta	Surface
Green River	2,966'
Bird's Nest	3,261'
Mahogany Bench	3,801'
TD	6,521'

2. Anticipated Depths of Oil Gas Water and Other Mineral Bearing Zones

The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Oil	Eagle	4,931'
Oil	Gulch	5,451'
Oil	Mesa	5,721'

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right # 49-251 (which was filed on May 7, 1964,) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not

depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at Red Wash Central Battery Disposal Site; SWSE, Section 27, T7S, R23E or Wonsits Valley Disposal Site; SWNW, Section 12, T8S, R21E.

3. Operator's Specification for Pressure Control Equipment:

A. A 3,000 psi double gate, 3,000 psi annular BOP (schematic included) from surface casing point to total depth.

B. Functional test daily.

C. All BOP connections subject to pressure shall be flanged, welded or clamped.

D. Kill line (2" min), 2 choke line valves (3" min), choke line (3" min), 2 kill line valves (2" min) and a check valve, 2 chokes with one remotely controlled from rig floor and a pressure gauge on choke manifold.

E. Upper and Lower Kelly cock valves with handles and safety valve and subs to fit all drill string connections.

F. IBOP or float sub available.

G. Fill up line must be installed above the uppermost preventer.

H. All casing strings shall be pressure tested (0.2 psi/foot or 1500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield pressure of the casing.

I. Ram type preventers and associated equipment shall be tested to the approved stack working pressure if isolated by test plug or to 50 percent of internal yield pressure of casing whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc…, for a 3M system and individual components shall be operable as designed.

ONSHORE OIL & GAS ORDER NO. 1
QEP Energy Company
RW 34-14AGR

DRILLING PROGRAM

4. Casing Design:

Hole Size	Csg. Size	Top (MD)	Bottom (MD)	Wt.	Grade	Thread	Cond.	MW
17-1/2""	14"	sfc	40'	Steel	Cond.	None	Used	Air
12-1/4" to 200'/11" to Surface TD	8-5/8"	sfc	3,851'	32.0	HCK-55	LTC	New	Air
7-7/8"	5-1/2"	sfc	6,521'	17.0	N-80	LTC	New	8-9.5 ppg

Casing Strengths:				Collapse	Burst	Tensile (min)
8-5/8"	32.0 lb.	HCK-55	LTC	3,740 psi	3,930 psi	452,000 lb.
5-1/2"	17.0 lb.	N-80	LTC	6,290 psi	7,740 psi	348,000 lb.

MINIMUM DESIGN FACTORS:

COLLAPSE: 1.125
BURST: 1.10
TENSION: 1.80

Area Fracture Gradient: 0.65 psi/foot
Maximum anticipated mud weight: 9.5 ppg
Maximum surface treating pressure: 4,000 psi
Over pull margin (minimum): 100,000 lbs

5. Cementing Program

14" Conductor:
Cement to surface with construction cement.

8-5/8" Surface Casing: sfc – 3,851' (MD)
Lead Slurry: 0' – 3,300'. 539 sks (1,558 cu ft) ECONOCEM V4 + 3.0 lb/sk Kol-Seal. Slurry wt: 11.0 ppg, Slurry yield: 2.89 ft^3/sk, Slurry volume: 12-1/4" to 200', 11" to Surface TD and hole + 75% excess.
Tail Slurry: 3,300' – 3,851'. 155 sks (232 cu ft) EXPANDACEM V3 + 0.2% HR-800 + 1.0 lb/sk Granulite TR 1/4 + 0.13 lb/sk Poly-E-Flake. Slurry wt: 13.5 ppg, Slurry yield: 1.49 ft^3/sk, Slurry volume: 11" to TD and hole + 75% excess.

ONSHORE OIL & GAS ORDER NO. 1
QEP Energy Company
RW 34-14AGR

DRILLING PROGRAM

5-1/2" Production Casing: sfc – 6,521' (MD)
Lead Slurry: 0' – 4,400'. 264 sks (779 cu ft) Extendacem cement + 3.0 lb/sk Kol-Seal. Slurry wt: 11.0 ppg, Slurry yield: 2.95 ft^3/sk, Slurry volume: 7-7/8" hole + 25% excess in open hole section.
Tail Slurry: 4,400' – 6,521'. 335 sks (496 cu ft) BONDCEM V1 + 0.2% HR-5 + 3.0 lb/sk Kol-Seal + 0.125 lb/sk Poly-E-Flake. Slurry wt: 13.5 ppg, Slurry yield: 1.48 ft^3/sk, Slurry volume: 7-7/8" hole + 25% excess.

*Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface on the production string. A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

6. Auxiliary Equipment

A. Kelly Cock – yes

B. Float at the bit – no

C. Monitoring equipment on the mud system – visually and/or PVT/Flow Show

D. Full opening safety valve on the rig floor – yes

E. Rotating Head – yes

F. Request for Variance

Possibility of drilling surface hole with air or aerated fluid:

A variance from 43 CFR 3160 Onshore Oil and Gas Order #2, Section III Requirements, subsection E. Special Drilling Operations is requested for the specific operation of drilling and setting surface casing on the subject well with a truck mounted air rig. The variance from the following requirements of Order #2 is requested because surface casing depth for this well is 50' into the Mahogany Bench formation and high pressures are not expected.

1. **Properly lubricated and maintained rotating head** – A diverter system in place of a rotating head. The diverter system forces the air and cutting returns to the reserve pit and is used to drill the surface casing.
2. **Blooie line discharge 100 feet from wellbore and securely anchored** – the blooie line discharge for this operation will be located 50 to 70 feet from the wellhead. This reduced length is necessary due to the smaller location size to minimize surface disturbance.

DRILLING PROGRAM

3. **Automatic igniter or continuous pilot light on blooie line** – a diffuser will be used rather than an automatic pilot/igniter. Water is injected into the compressed air and eliminates the need for a pilot light and the need for dust suppression equipment.
4. **Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the wellbore** – compressors located within 50 feet on the opposite side of the wellbore from the blooie line and is equipped with a 1) emergency kill switch on the driller's console, 2) pressure relief valves on the compressors, 3) spark arrestors on the motors.
5. **Well Kill Fluid** – A suitable amount of water and weighting agents will be available in the reserve pit during air drilling operations to kill the well, if necessary. No overpressured zones are expected in the area.
6. **Deflector on the end of the blooie line** – Questar will mount a deflector unit at the end of the blooie line for the purpose of changing the direction and velocity of the air and cuttings flow into the reserve pit. Changing the velocity and direction of the cuttings and air will preserve the pit liner. In the event the deflector washes out due to erosion caused by the sand blasting effect of the cuttings, there will be no problem because the deflector is mounted on the very end of the blooie. A washed out deflector will be easily replaced.
7. **Flare Pit** – there will be no need of a flare pit during the surface hole air drilling operation because the blooie line is routed directly to the reserve pit. When the big rig arrives for the main drilling after setting surface casing, a flare box will be installed and all flare lines will be routed to the flare box.

G. All other operations and equipment for air/gas drilling shall meet specifications in Onshore Order #2, Section III Requirements, subsection E. Special Drilling Operations and Onshore Order #1.

H. Drilling below the 8-5/8" casing will be done with water based mud. Maximum anticipated mud weight is 9.5 ppg.

I. No minimum quantity of weight material will be required to be kept on location.

J. Gas detector will be used from surface casing depth to TD.

Gas detector will be used from surface casing depth to TD.

7. **Testing, logging and coring program**

A. Cores – none anticipated

B. DST – none anticipated

DRILLING PROGRAM

C. Logging – Mud logging –Surf Casing to TD
GR-SP-Induction, Neutron Density

D. Formation and Completion Interval: Green River intervals, final determination of completion will be made by analysis of logs.
Stimulation – Stimulation will be designed for the particular area of interest as encountered.

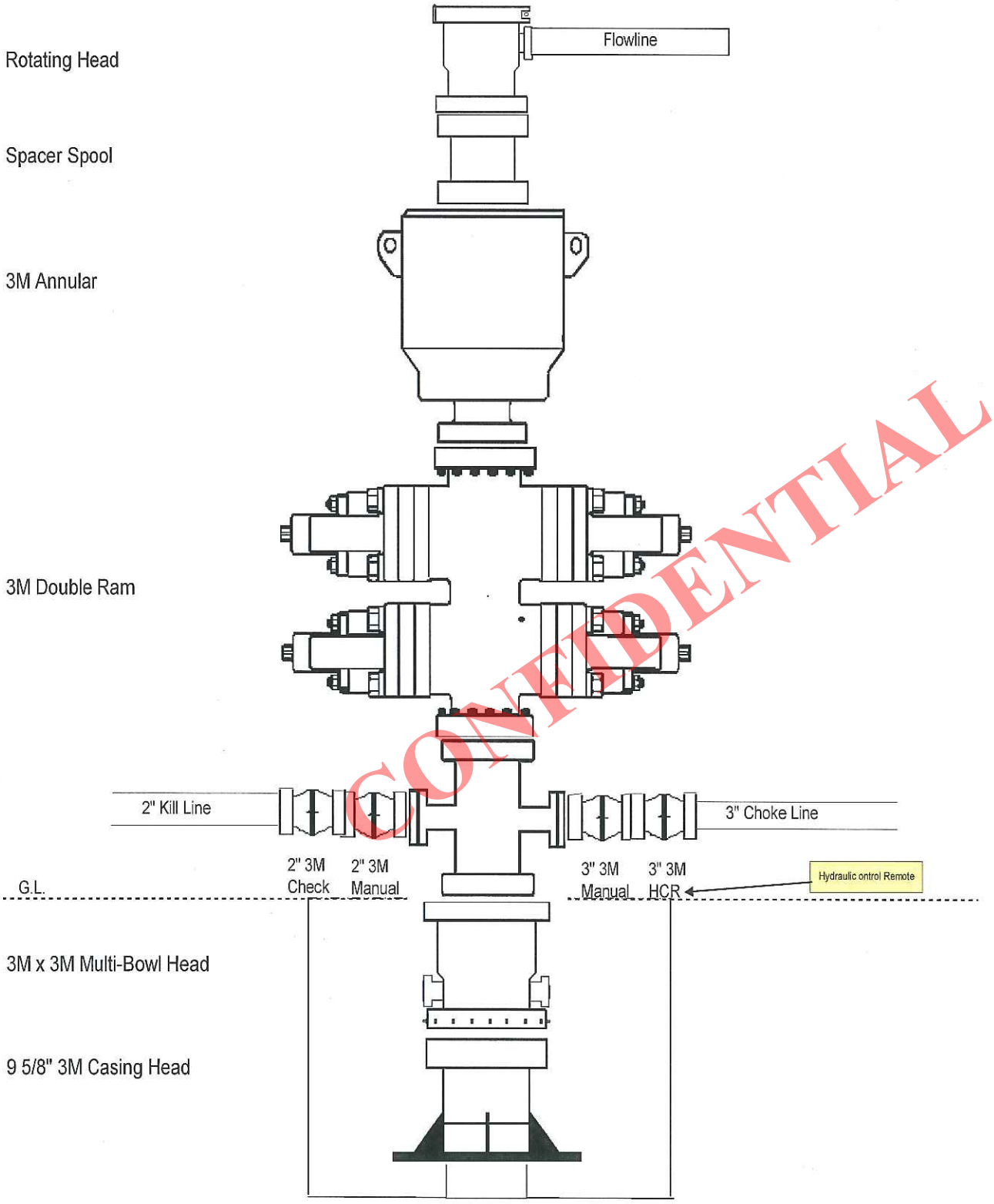
8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards

No abnormal temperatures or pressures are anticipated. No H2S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 2,300 psi. Maximum anticipated bottom hole temperature is 120° F.

ONSHORE OIL & GAS ORDER NO. 1
QEP Energy Company
RW 34-14AGR

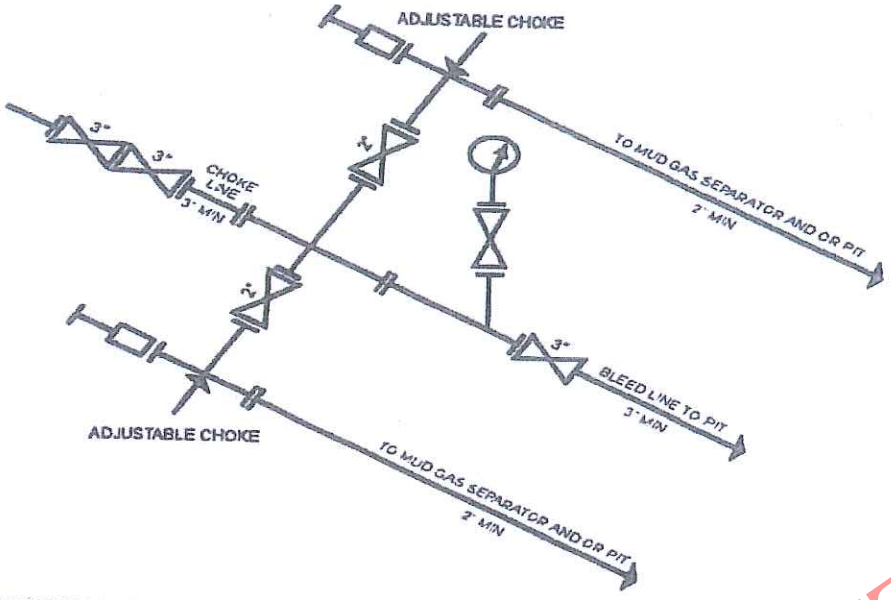
DRILLING PROGRAM

3M BOP STACK



ONSHORE OIL & GAS ORDER NO. 1
QEP Energy Company
RW 34-14AGR

DRILLING PROGRAM



3M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY
[54 FR 39528, Sept. 27, 1989]

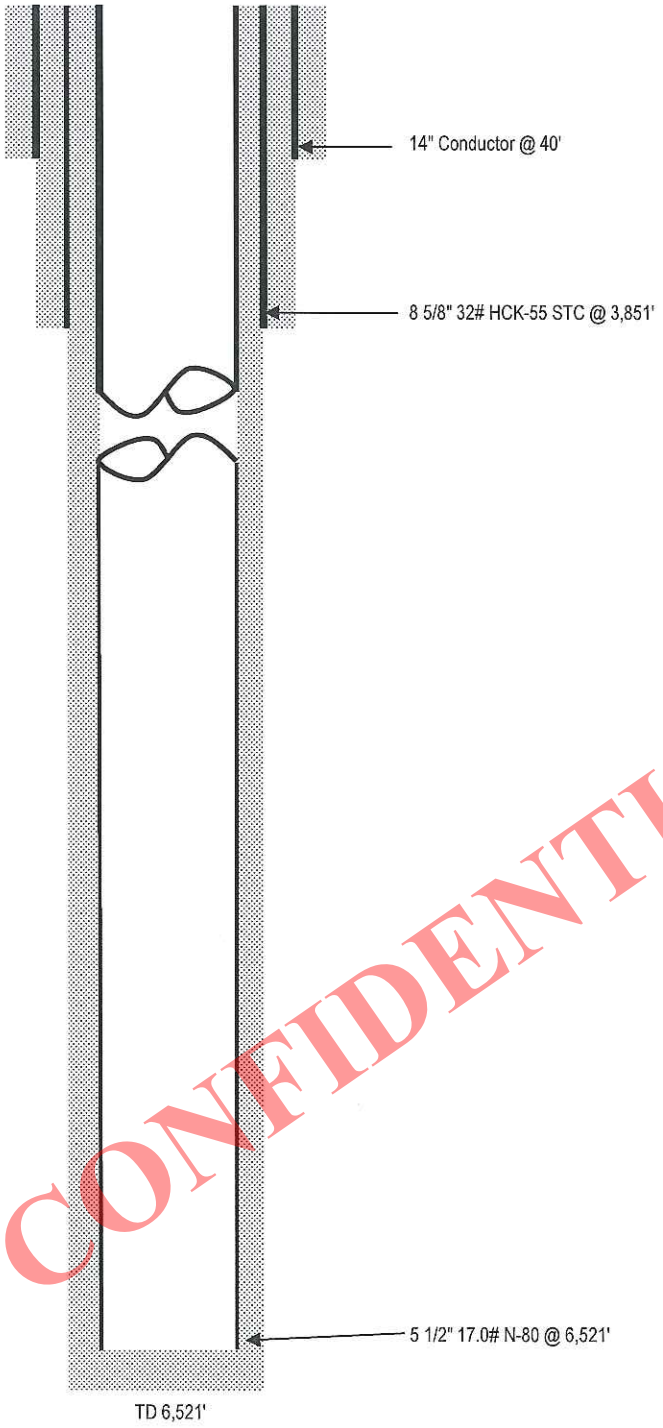
API Well Number: 43047534390000

Modified 11-08-2012 CRA

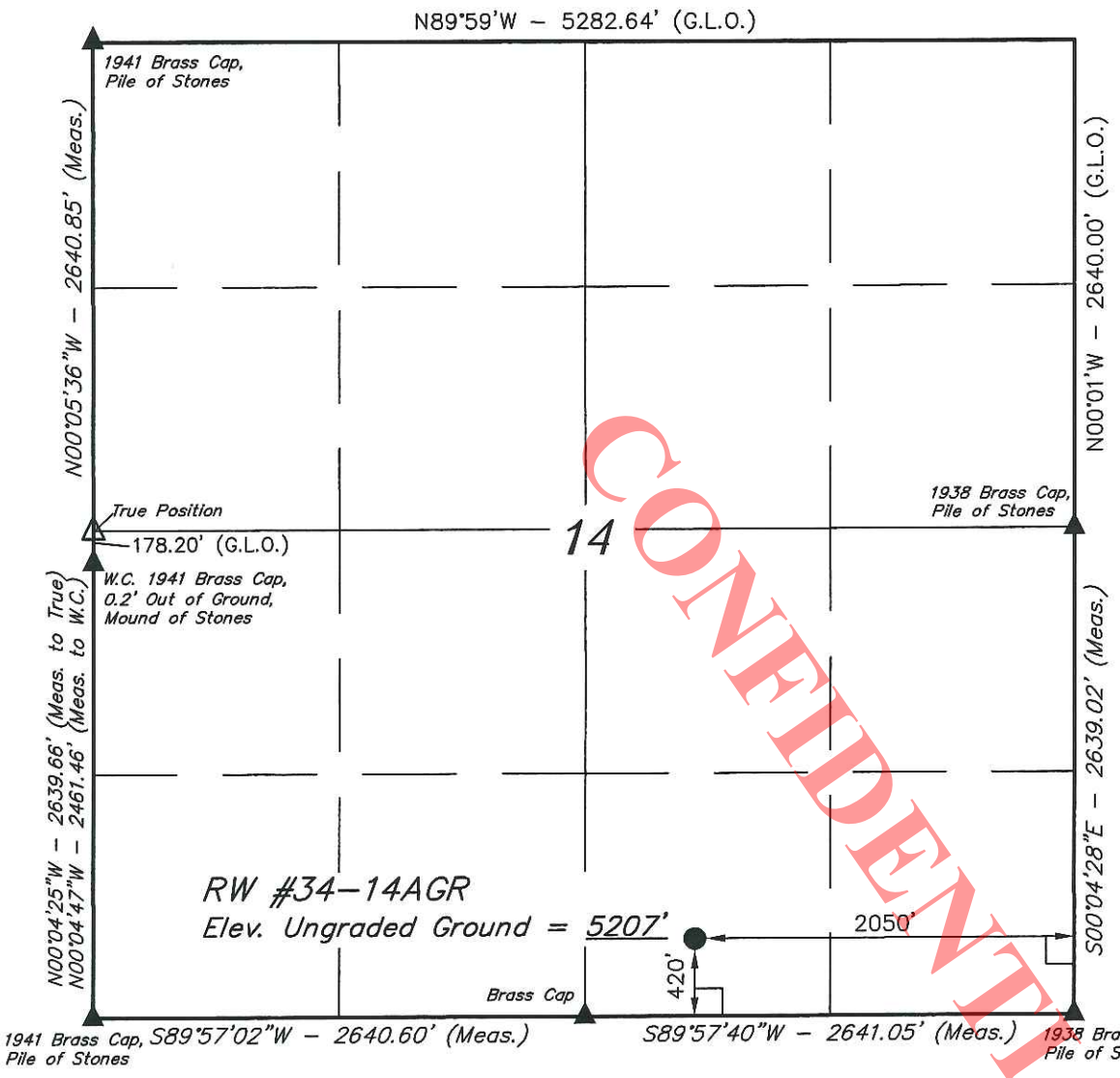
RW 34-14AGR
API # 43-047
Proposed WBD
Uinta Basin

NESE Sec. 14, T7S-R22E, Uintah Co, UT
LOCATION: 420' FSL, 2,050' FEL

KB 5,217'
GL 5,201'



T7S, R22E, S.L.B.&M.



QEP ENERGY COMPANY

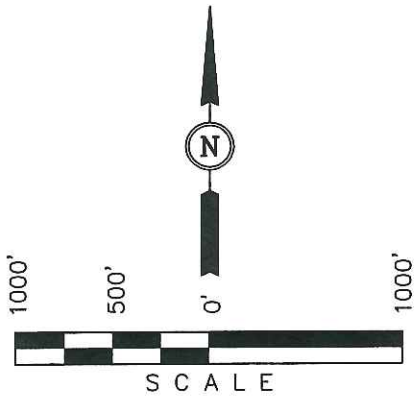
Well location, RW #34-14AGR, located as shown in the SW 1/4 SE 1/4 of Section 14, T7S, R22E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

07-25-12

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(NAD 83)
LATITUDE = 40°12'19.35" (40.205375)
LONGITUDE = 109°24'18.40" (109.405111)
(NAD 27)
LATITUDE = 40°12'19.48" (40.205411)
LONGITUDE = 109°24'15.93" (109.404425)

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST – VERNAL, UTAH 84078
(435) 789-1017

SCALE: 1" = 1000'	DATE SURVEYED: 07-10-12	DATE DRAWN: 07-20-12
PARTY: G.M. B.S. J.J.	REFERENCES: G.L.O. PLAT	
WEATHER: WARM	FILE: QEP ENERGY COMPANY	

API Well Number: 43047534390000

API Well Number: 43047534390000

QEP ENERGY COMPANY

RW #34-14A & RW #34-14AGR

LOCATED IN UINTAH COUNTY, UTAH
SECTION 14, T7S, R22E, S.L.B.&M.

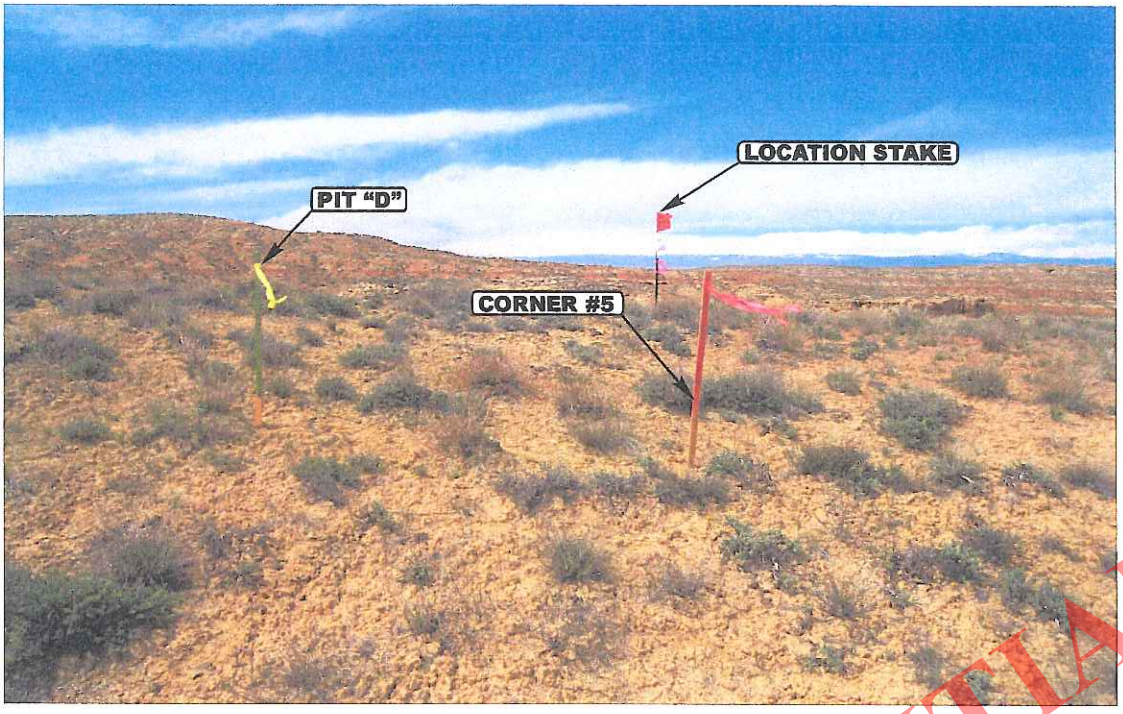


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE **CAMERA ANGLE: NORTHWESTERLY**

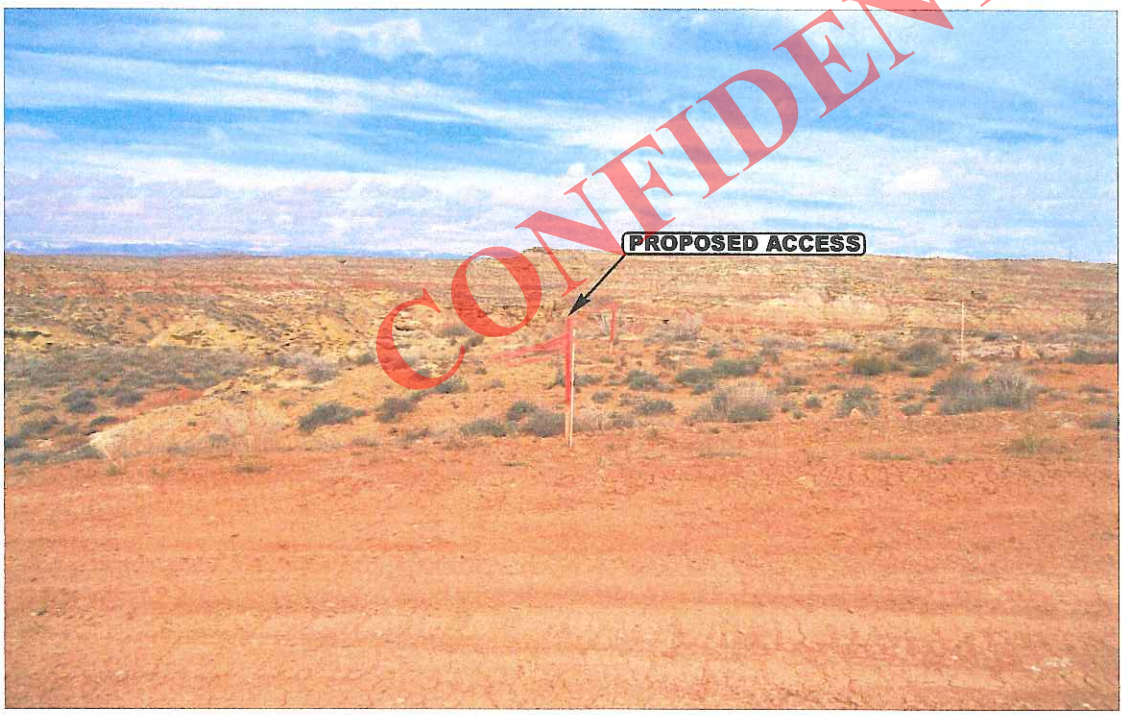


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS **CAMERA ANGLE: NORTHERLY**

- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS	05 MONTH	03 DAY	11 YEAR	PHOTO
TAKEN BY: A.F.	DRAWN BY: C.A.G.	REV:07-19-12J.L.G.		

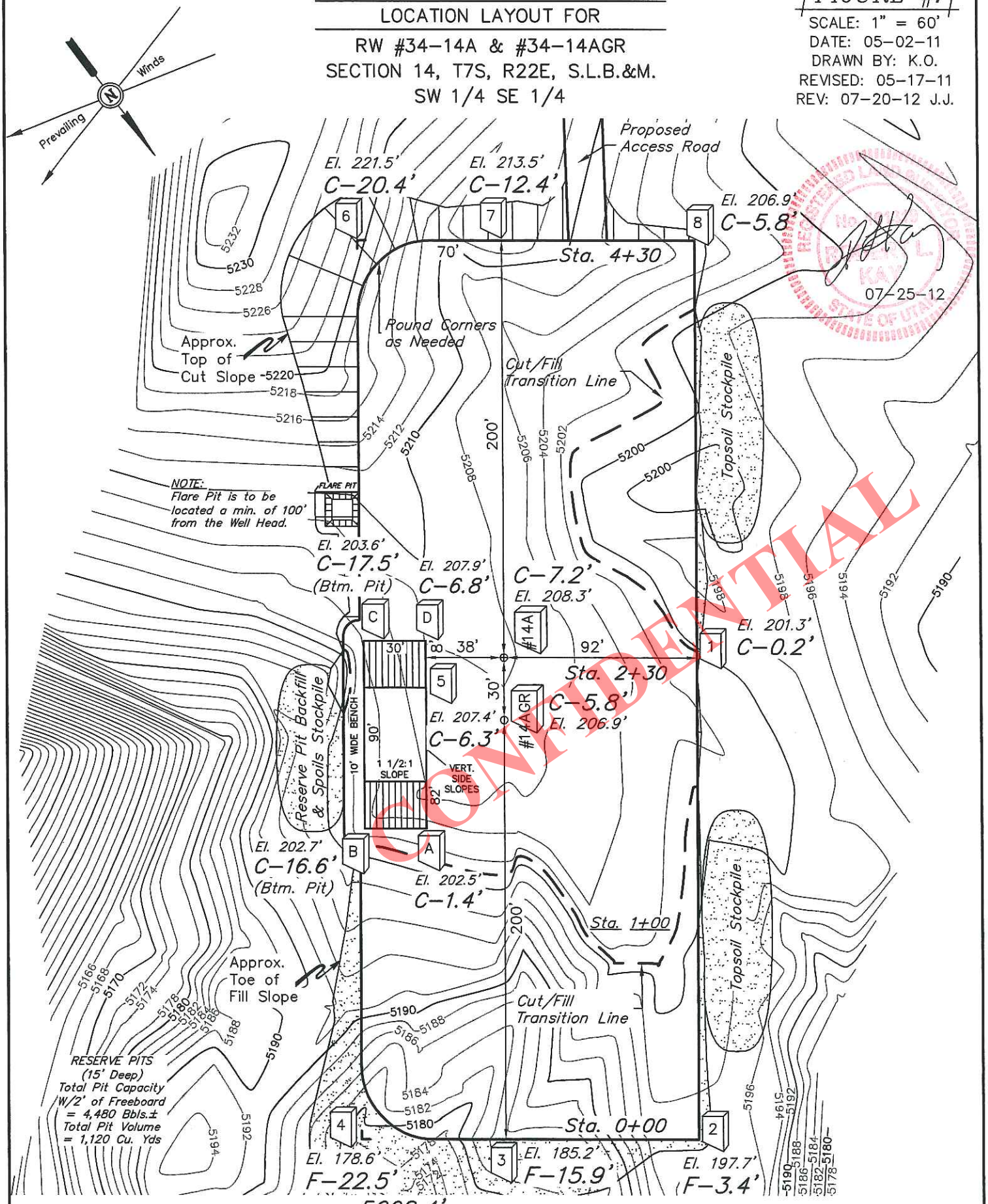
API Well Number: 43047534390000

QEP ENERGY COMPANY

LOCATION LAYOUT FOR

RW #34-14A & #34-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
SW 1/4 SE 1/4

FIGURE #1
SCALE: 1" = 60'
DATE: 05-02-11
DRAWN BY: K.O.
REVISED: 05-17-11
REV: 07-20-12 J.J.



Elev. Ungraded Ground At Loc. Stake = 5208.4'
FINISHED GRADE ELEV. AT LOC. STAKE = 5201.1'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

API Well Number: 43047534390000

QEP ENERGY COMPANY

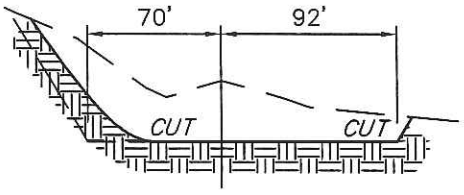
TYPICAL CROSS SECTIONS FOR

RW #34-14A & #34-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
SW 1/4 SE 1/4

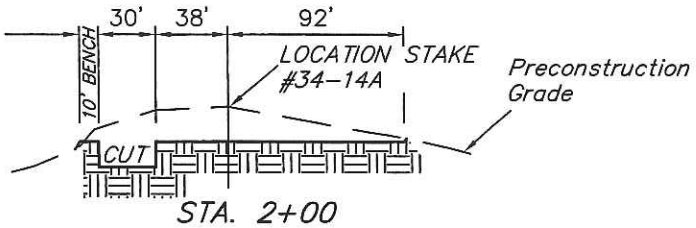
FIGURE #2

1" = 40'
X-Section Scale
1" = 100'

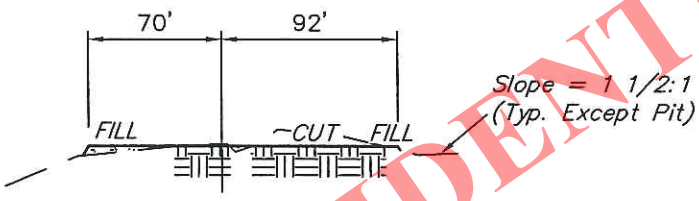
DATE: 05-02-11
DRAWN BY: K.O.
REVISED: 05-17-11
REV: 07-20-12 J.J.



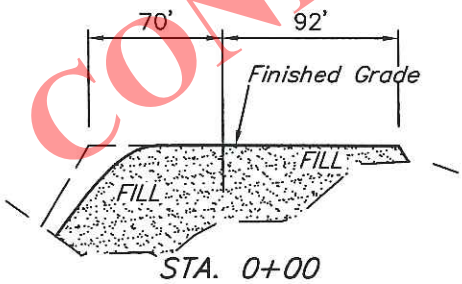
STA. 4+00



STA. 2+00



STA. 1+00



STA. 0+00

NOTE:
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE ACREAGES

WELL SITE DISTURBANCE = ± 1.773 ACRES
ACCESS ROAD DISTURBANCE = ± 0.129 ACRES
PIPELINE DISTURBANCE = ± 2.965 ACRES
TOTAL = ± 4.867 ACRES

* *NOTE:*
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

(6") Topsoil Stripping	=	*1,710* Cu. Yds.
Remaining Location	=	*10,560* Cu. Yds.
TOTAL CUT	=	*12,270* CU.YDS.
FILL	=	*10,000* CU.YDS.

EXCESS MATERIAL	=	*2,270* Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	*2,270* Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	=	*0* Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING
*85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017*

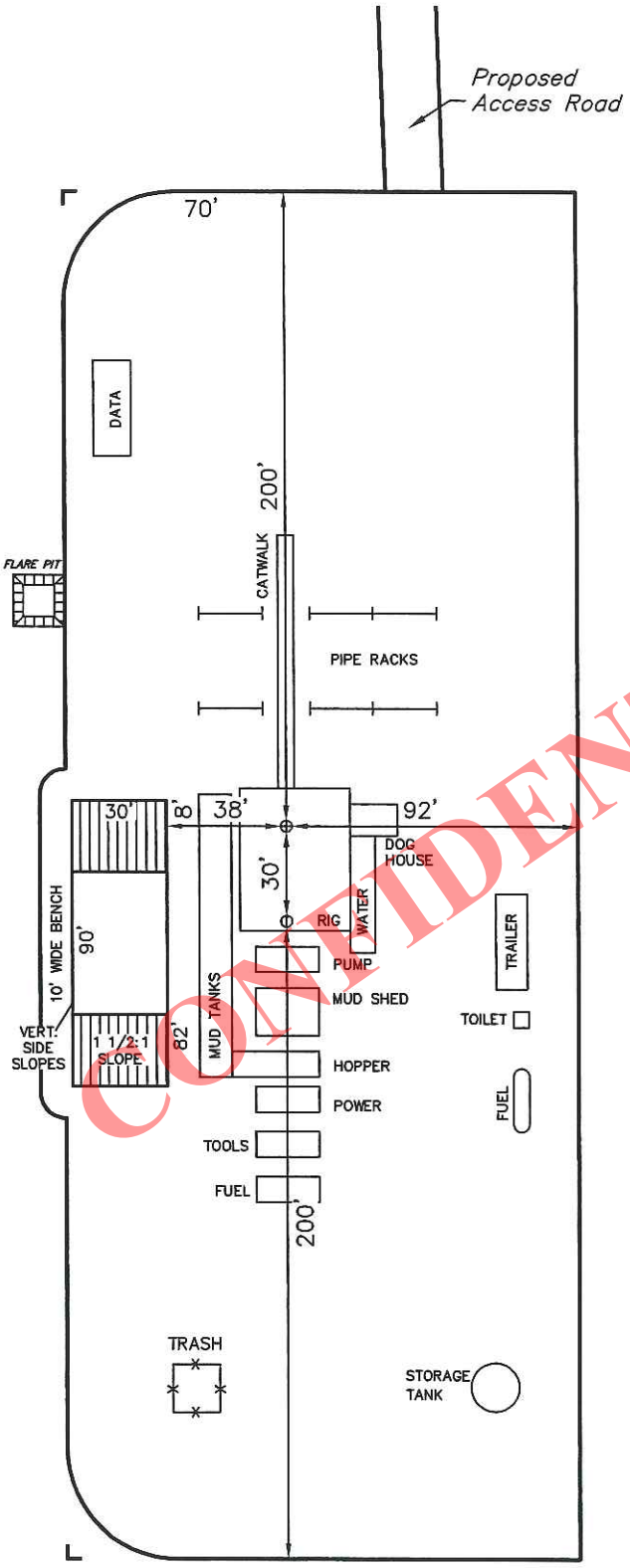
API Well Number: 43047534390000

QEP ENERGY COMPANY

TYPICAL RIG LAYOUT FOR

RW #34-14A & #34-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
SW 1/4 SE 1/4

FIGURE #3
SCALE: 1" = 60'
DATE: 05-02-11
DRAWN BY: K.O.
REVISED: 05-17-11
REV: 07-20-12 J.J.



NOTE:
Flare Pit is to be located a min. of 100' from the Well Head.

UINTAH ENGINEERING & LAND SURVEYING
*85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017*

API Well Number: 43047534390000

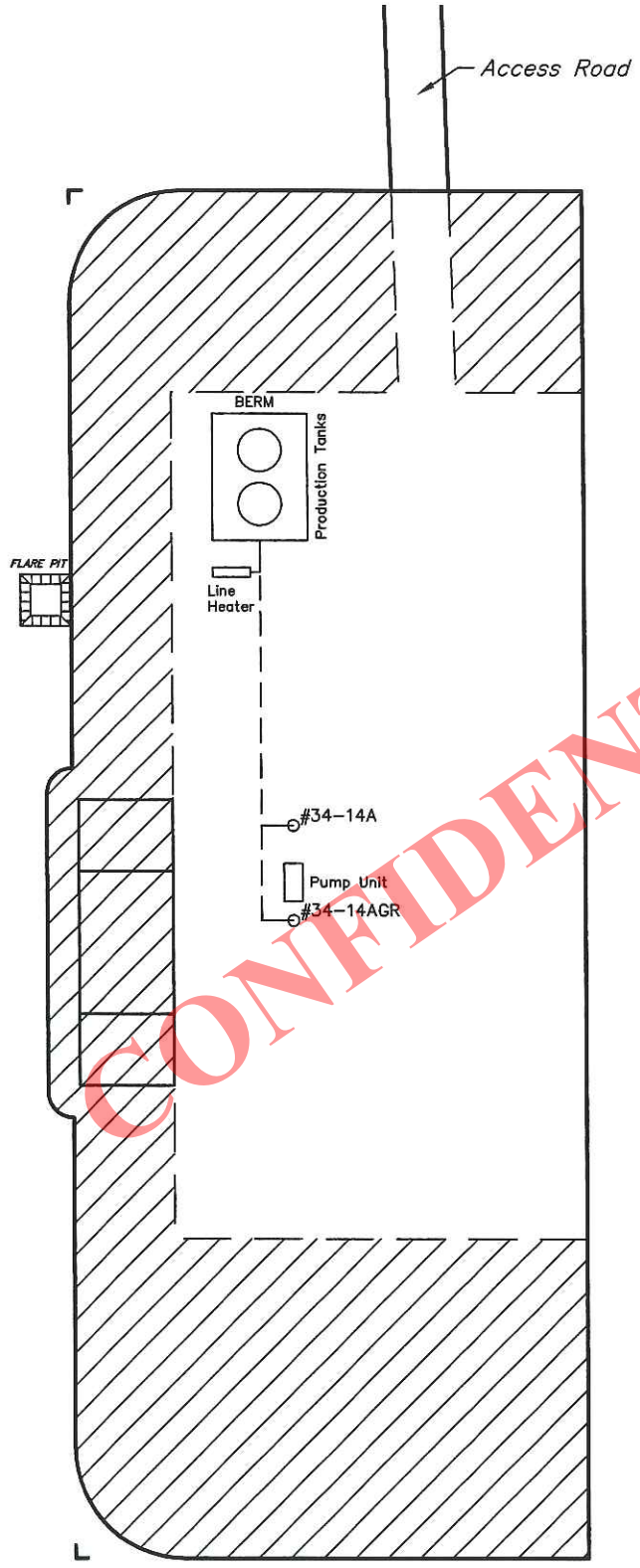
QEP ENERGY COMPANY

PRODUCTION FACILITY LAYOUT FOR

RW #34-14A & #34-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
SW 1/4 SE 1/4

FIGURE #4

SCALE: 1" = 60'
DATE: 05-11-11
DRAWN BY: K.O.
REVISED: 05-17-11
REV: 07-08-11 J.J.
REV: 08-01-11 J.J.
REV: 07-20-12 J.J.



Re-habbed Area

APPROXIMATE ACREAGES
UN-RECLAIMED = ± 0.822 ACRES

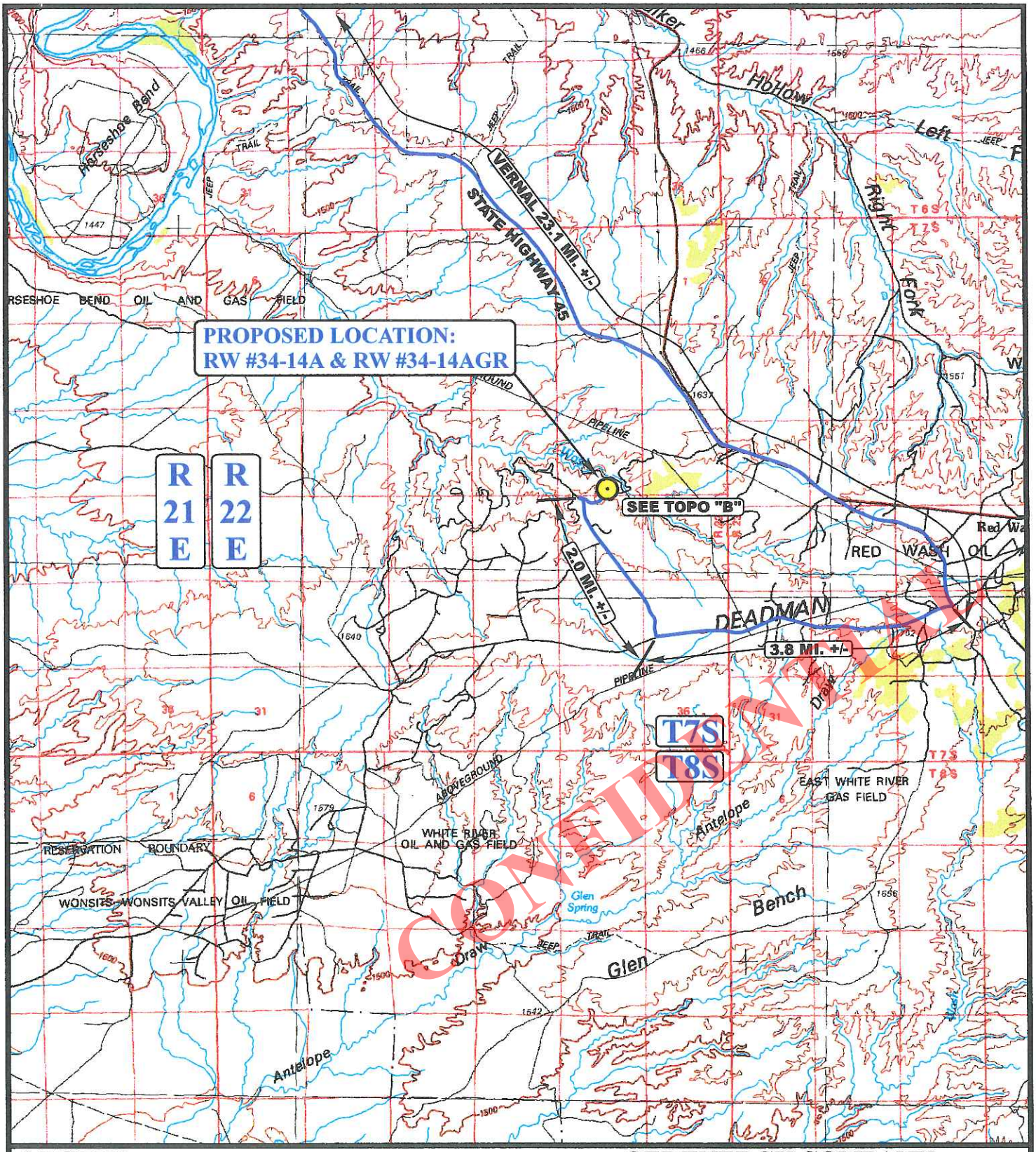
UINTAH ENGINEERING & LAND SURVEYING
*85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017*

QEP ENERGY COMPANY
RW #34-14A & RW #34-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.

PROCEED IN AN EASTERLY, THEN SOUTHERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 3.9 MILES TO THE JUNCTION OF STATE HIGHWAY 45; EXIT RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 19.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE WEST; TURN RIGHT AND PROCEED IN AN WESTERLY DIRECTION APPROXIMATELY 3.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN RIGHT AND PROCEED IN A NORTHERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 2.0 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN RIGHT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE BEGINNING OF THE PROPOSED ACCESS ROAD TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 187' TO PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 29.3 MILES.

API Well Number: 43047534390000



LEGEND:

PROPOSED LOCATION

N

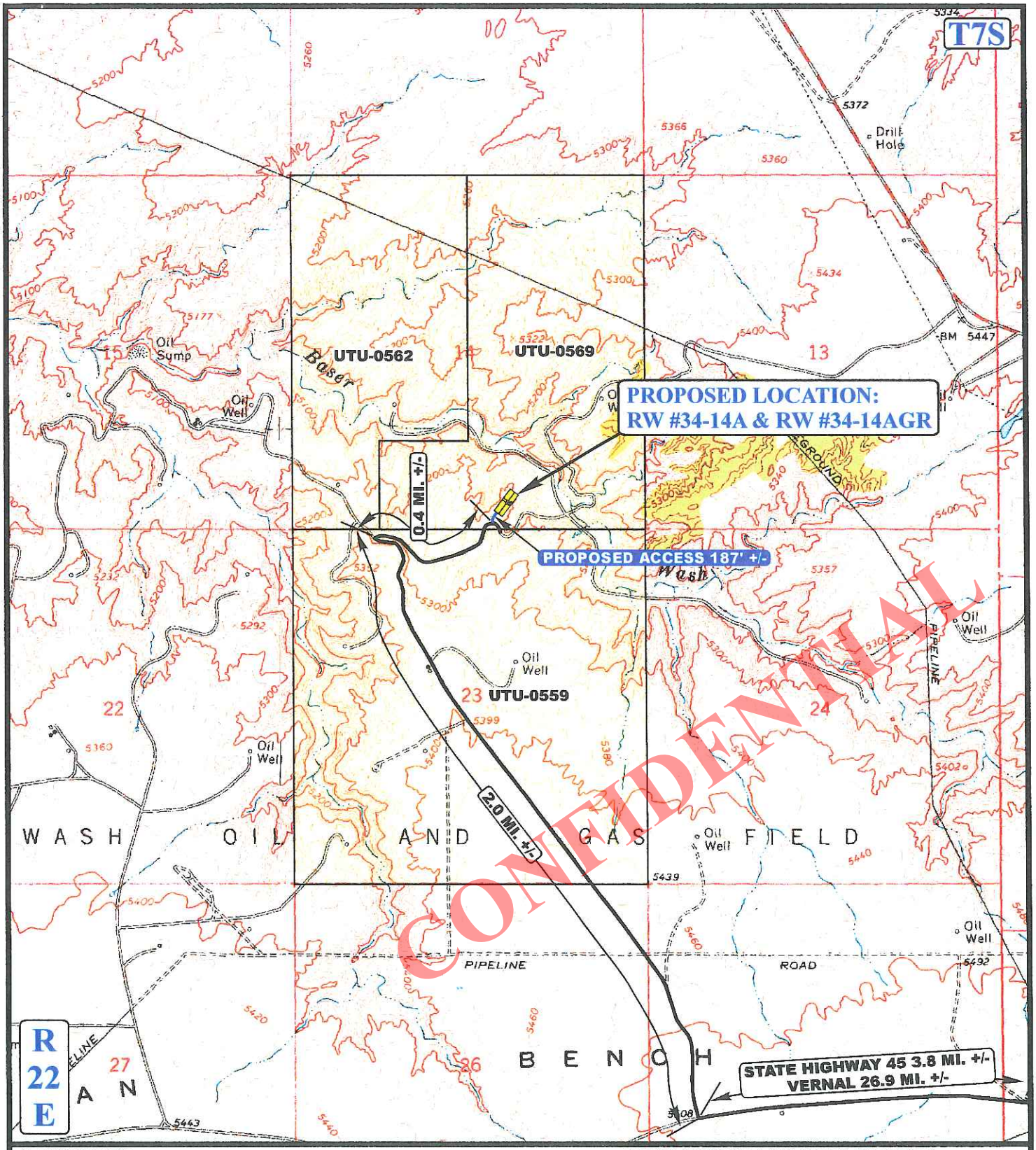
QEP ENERGY COMPANY

RW #34-14A & RW #34-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
SW 1/4 SE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	05 MONTH	03 DAY	11 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: C.A.G.	REV:07-19-12J.L.G.		

API Well Number: 43047534390000



LEGEND:

EXISTING ROAD

PROPOSED ACCESS ROAD

N

QEP ENERGY COMPANY

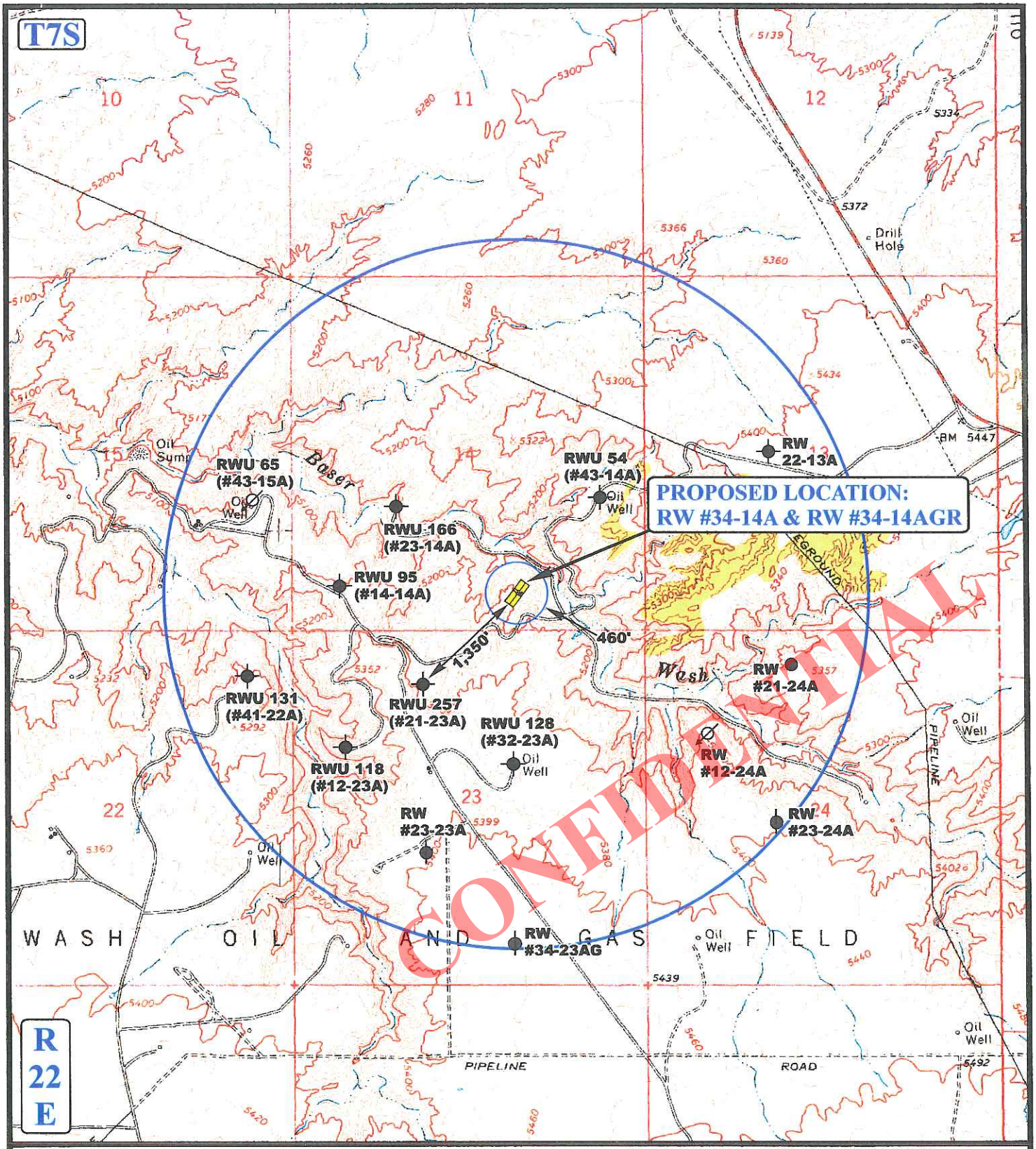
RW #34-14A & RW #34-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
SW 1/4 SE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

ACCESS ROAD MAP | 05 MONTH | 03 DAY | 11 YEAR | B TOPO

SCALE: 1" = 2000' | DRAWN BY: C.A.G. | REV:07-19-12J.L.G.

API Well Number: 43047534390000



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

N

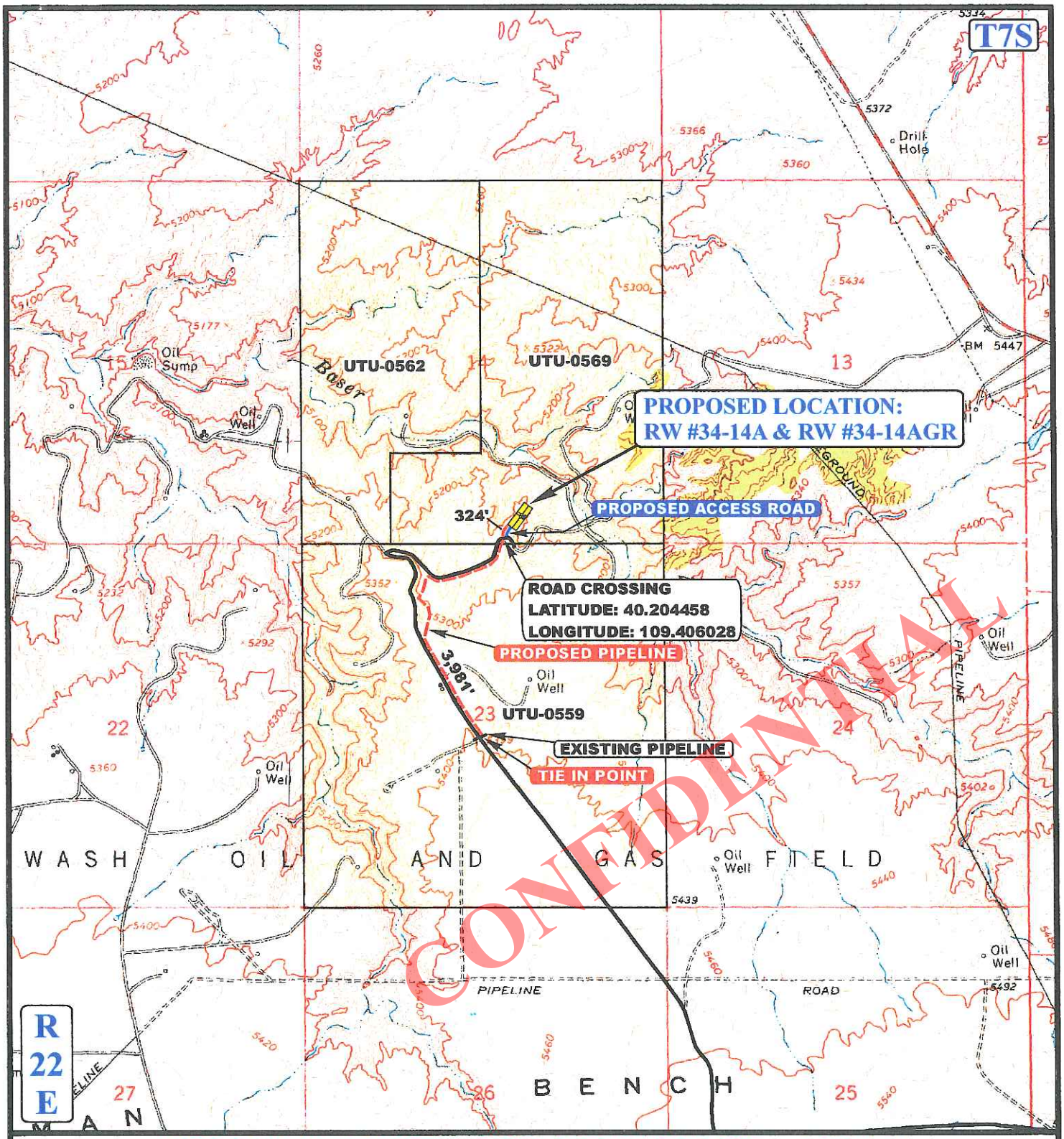
QEP ENERGY COMPANY

RW #34-14A & RW #34-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
SW 1/4 SE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	05 MONTH	03 DAY	11 YEAR
SCALE: 1" = 2000'	DRAWN BY: C.A.G.	REV:07-19-12J.L.G.	C TOPO

API Well Number: 43047534390000



APPROXIMATE TOTAL PIPELINE DISTANCE = 4,305' +/-

LEGEND:

EXISTING PIPELINE

PROPOSED PIPELINE

PROPOSED ACCESS

N

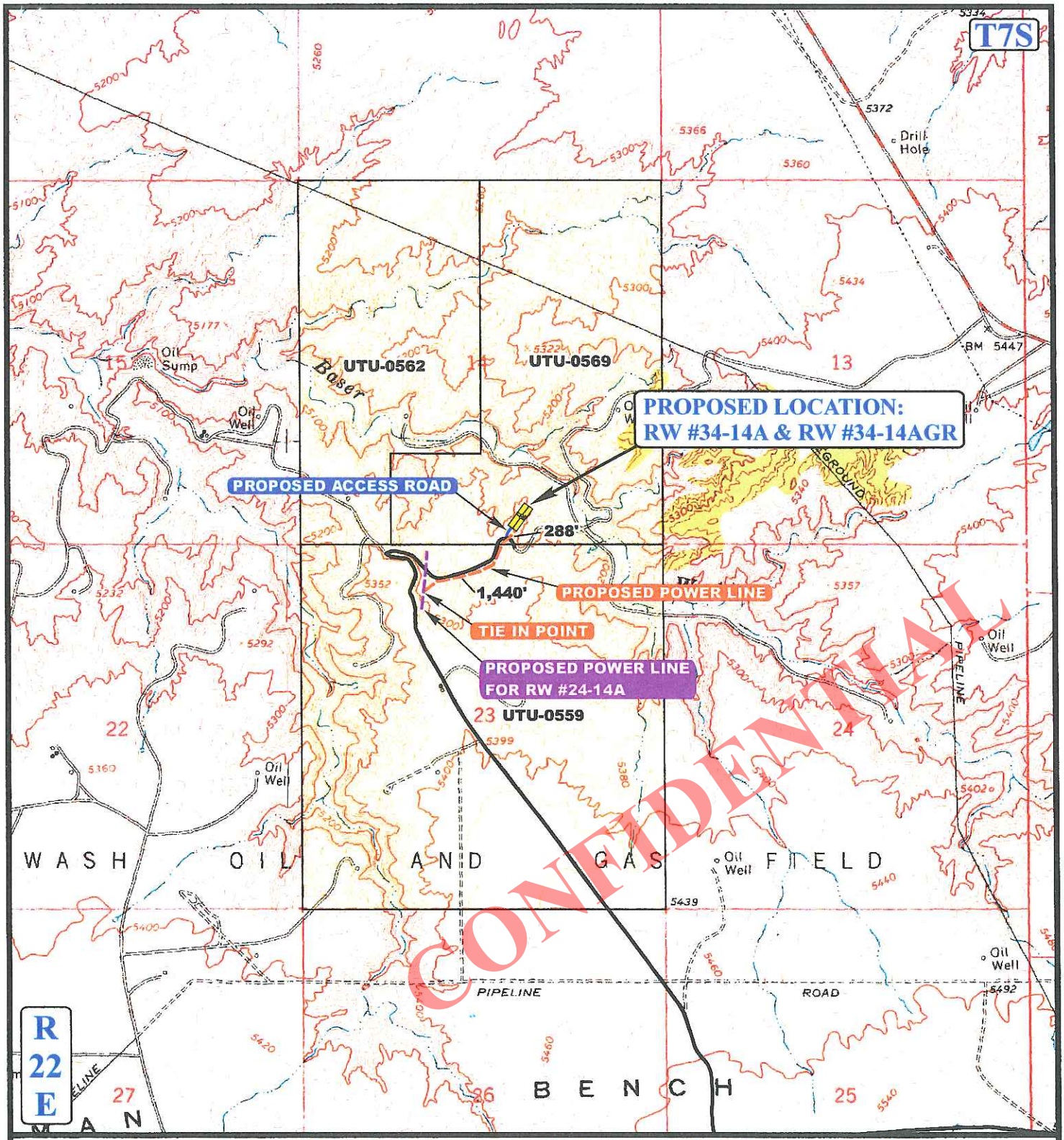
QEP ENERGY COMPANY

RW #34-14A & RW #34-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
SW 1/4 SE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	05 MONTH	03 DAY	11 YEAR	D TOPO
SCALE: 1" = 2000'	DRAWN BY: C.A.G.	REV:07-19-12J.L.G.		

API Well Number: 43047534390000



APPROXIMATE TOTAL POWER LINE DISTANCE = 1,728' +/-

LEGEND:

- EXISTING PIPELINE
- PROPOSED POWER LINE
- PROPOSED POWER LINE (SERVICING OTHER WELLS)
- PROPOSED ACCESS

N

QEP ENERGY COMPANY

RW #34-14A & RW #34-14AGR
SECTION 14, T7S, R22E, S.L.B.&M.
SW 1/4 SE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP | 07 MONTH | 19 DAY | 12 YEAR | E TOPO

SCALE: 1" = 2000' | DRAWN BY: J.L.G. | REVISED: 00-00-00

QEP ENERGY COMPANY

REFERENCE MAP: AREA OF VEGETATION

RW #34-14B (RE-ENTRY)

LOCATED IN UINTAH COUNTY, UTAH
SECTION 14, T7S, R23E, S.L.B.&M.

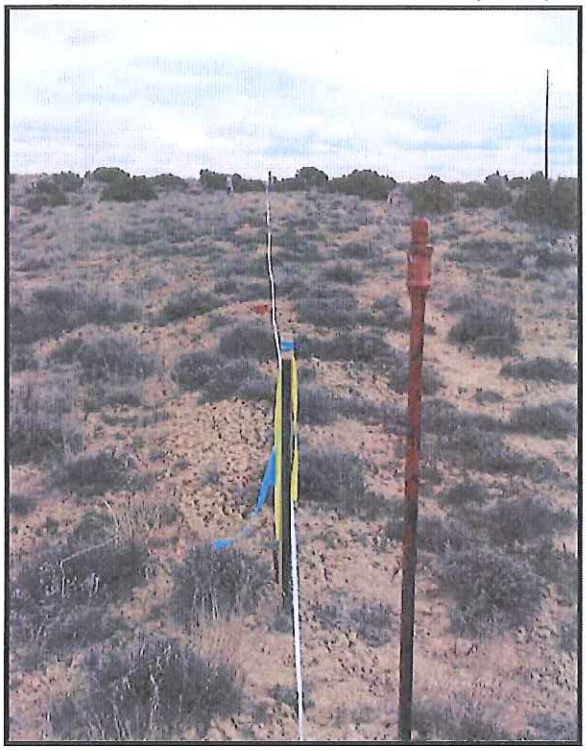
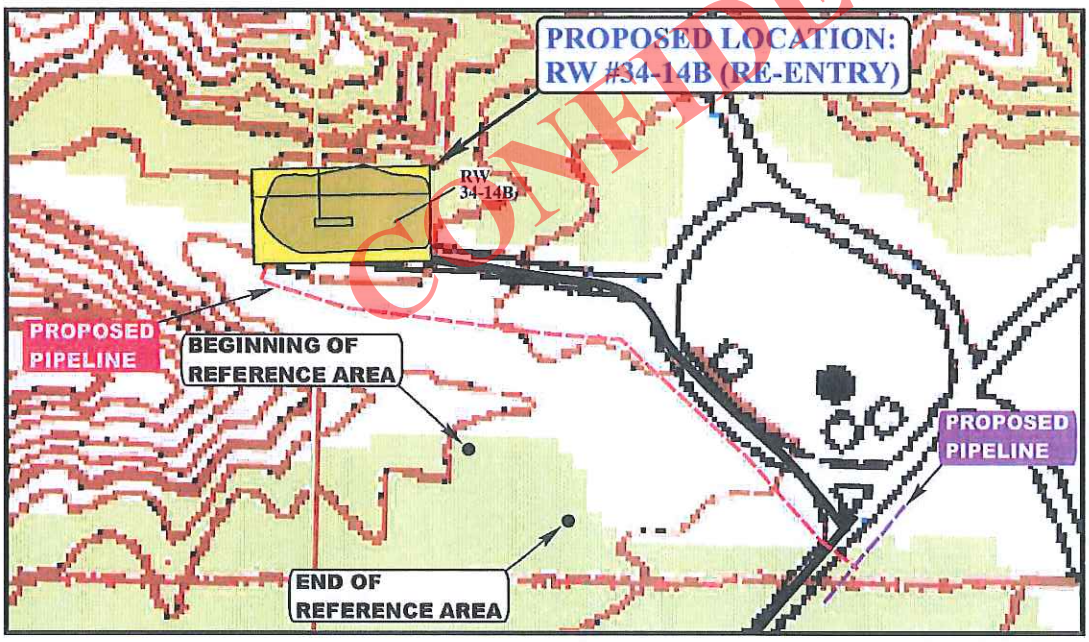


PHOTO: VIEW FROM BEGINNING OF REFERENCE AREA

NOTE:

BEGINNING OF REFERENCE AREA
UTM NORTHING: 14605204.779
UTM EASTING: 2117477.374
LATITUDE: 40.202883
LONGITUDE: -109.291497

END OF REFERENCE AREA
UTM NORTHING: 14605092.592
UTM EASTING: 2117642.486
LATITUDE: 40.202567
LONGITUDE: -109.290914



- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

SCALE: 1" = 300'	08 MONTH	08 DAY	11 YEAR	REF.
TAKEN BY: A.F.	DRAWN BY: J.L.G.	REVISED: 00-00-00		

QEP ENERGY COMPANY
RW 34-14AGR
SWSE, SECTION 14, T7S, R22E
UINTAH COUNTY, UT
LEASE # UTU-0569
MULTI-POINT SURFACE USE & OPERATIONS PLAN

THIS WELL IS BEING TWINNED ON WELL LOCATION RW 34-14A.

An onsite inspection was conducted for the RW 34-14AGR on August 30, 2012. Weather conditions were sunny at the time of the onsite. In attendance at the inspection were the following individuals:

Kevin Sadlier	Bureau of Land Management
Valyn Davis	QEP Energy Company
Amanda Taylor	QEP Energy Company
Jeff Atwood	QEP Energy Company
Eric Wickersham	QEP Energy Company
McCoy Anderson	Uintah Engineering & Land Surveying

1. **Existing Roads**:

See attached Wellsite Plats showing directional reference stakes on location, and attached TOPO Map "B" showing access to location from existing roads.

The proposed well site is located approximately 29 miles south of Vernal, Utah.

-See attached TOPO Map "A".

Existing roads will be upgraded, maintained and repaired as necessary.

2. **Planned Access Roads**:

An offlease right-of-way is not required. The entire well pad and access road are located within the Red Wash Unit.

There will be a new access road approximately 187' in length, 30' in width, containing approximately 0.129 acres.

New access roads on BLM surface will be crowned (2 to 3%), ditched, and constructed with a running surface of 18 feet and a maximum disturbed width of 30 feet. Any additional disturbance required due to intersections or sharp curves will be discussed at the on-site and approved by the BLM.

Graveling or capping the roadbed will be performed as necessary to provide a well constructed safe road. Surface disturbance and vehicular traffic will be limited to the approved location and access route or, as proposed by the Operator.

The road surface and shoulders will be kept in a safe and usable condition and will be maintained in accordance with the original construction standards.

If culverts are needed, the location and size of the culverts will be proposed during the on-site. The operator will clean and maintain approved culverts as needed.

All drainage ditches and culverts will be kept clear and free-flowing and will be maintained according to original construction standards.

The access road disturbed area will be kept free of trash during operations. All traffic will be confined to the approved road running surface. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause excess siltation or accumulation of debris in the drainage nor shall the drainage be blocked by the roadbed.

Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Should mud holes develop, the holes shall be filled in and detours around the holes avoided.

When snow is removed from the road during the winter months, the snow should be pushed outside of the borrow ditches, and the turnouts kept clear so that snowmelt will be channeled away from the road.

Refer to Topo Map B for the location of the proposed access

3. **Location of Existing Wells Within a 1-Mile Radius**:

A map will be provided with the site-specific APD showing the location of existing wells within a one mile radius.

Please refer to Topo map C.

4. **Location of Existing and Proposed Facilities:**

The following guidelines will apply if the well is productive.

A containment dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks). These dikes will be constructed of compacted impervious subsoil; hold 110% of the capacity of the largest tank; and, be independent of the back cut. If a Spill Prevention, Control, and Countermeasure (SPCC) Plan is required by the Environmental Protection Agency, the containment dike may be expanded to meet SPCC requirements with approval by the BLM/VFO AO. The specific APD will address additional capacity if such is needed due to environmental concerns. The use of topsoil for the construction of dikes will not be allowed.

All loading lines will be placed inside the berm surrounding the tank batteries.

All permanent (on site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a color approved by the BLM.

It was determined on the onsite by the BLM VFO/AO that the facilities will be painted Covert Green.

5. Power line

Electrification of the well sites will reduce the emissions and increase reliability by removing the gas venting of pumps for the heat trace system and chemical injection, as well as increase well pad safety by adding lights to the location.

Access into the proposed power lines will be from existing highways and roads. All construction and vehicular traffic will be confined to the authorized access corridor and designated county and/or BLM roads unless otherwise authorized and approved by the regulating agency

All work will be done in accordance with REA specifications.

QEP Energy Company is proposing a 50 ft temporary authorized access and a 15 ft permanent authorized access for power line maintenance. Minimal to no disturbance is required for the power lines following roads and existing ROW's.

The proposed power line will be 1,728' in length, 15 ft in width, containing 0.595 acres.

6. Location and Type of Water Supply:

Fresh water will be obtained from Wonsits Valley water right # 49-251 (which was filed on May 7, 1964,) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes.

7. Source of Construction Materials:

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

8. Methods of Handling Waste Materials:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids including salts and chemicals will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be used at the next drill site or will be removed and disposed of at an approved waste disposal facility within 6 months after drilling is terminated. Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

Unless specified in the site specific APD, the reserve pit will be constructed on the location and will not be located within natural drainages, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

It was determined at the on-site inspection that a pit liner is necessary; the reserve pit will be lined with a synthetic reinforced liner, a minimum of 20 millimeters thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap will be disposed of in the pit.

Reserve pit leaks are considered an undesirable event and will be orally reported to the AO.

Disposal of Produced Water:

After first production, produced wastewater will be confined to the approved pit or storage tank for a period not to exceed 90 days. During the 90 day period, in accordance with Onshore Order # 7, all produced water will be contained in tanks on location.

After the 90 day period, the produced water will be contained in tanks on location and then hauled by truck to the following pre-approved disposal site:

Red Wash Disposal well located in the SESE, Section 28, T7S, R23E,
West End Disposal located in the NESE, Section 28, T7S, R22E.

Produced water, oil, and other byproducts will not be applied to roads or well pads for control of dust or weeds. The dumping of produced fluids on roads, well sites, or other areas will not be allowed.

Any spills of oil, gas, salt water or other noxious fluids will be immediately cleaned up and removed to an approved disposal site. The spills will be reported to the AO and other authorities as appropriate.

A chemical porta-toilet will be furnished with the drilling rig. The chemical porta-toilet wastes will be hauled to Ashley Valley Sewer and Water System for disposal.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. Trash will not be burned on location. All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig. All trash and waste material will be hauled to the Uintah County Landfill.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or

completing of wells. Furthermore, extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will not be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of wells within these areas. Specific APD's shall address any modifications from this policy.

9. Ancillary Facilities:

This will be an independent well location. Product will be contained in two 500 bbl tanks and then transported from location to delivery site.

A suitable muffler will be installed on pumping unit to help reduce noise control.

The pipeline will be steel, welded schedule #40 or greater, and consist of one (1) 3" inside diameter oil line and two (2) 1 1/4" inside diameter trace lines. The pipelines will be welded together on location and pulled separately into place. The lines will be banded together in one (1) bundle, insulated, and covered with tin painted Covert Green. The pipeline will be laid within 20 feet of existing roads, pipelines, or existing route authorizations as much as possible. Pipeline route alternatives will be discussed at the on-site and the resulting proposal will be described in the APD. Road crossings will have a casing installed over the pipeline and ramped so the pipeline will not be buried. Pipeline Route Authorizations will be 30' wide and the location noted on maps accompanying the APD.

FUEL GAS LINE: The pipeline will be a 2" inside diameter, poly pipe with a rating of 160 psi or greater. The line will be laid adjacent to the bundled line following the line to location.

The pipeline will be 4,305' in length, containing approximately 2.965 acres.

10. Well Site Layout:

A Location Layout Diagram describing drill pad cross-sections, cuts and fills, and locations of mud tanks, reserve pits, flare pit or flare box, pipe racks, trailer parking, spoil dirt stockpile(s), and the surface material stockpile(s) will be included with the site specific APD.

Please see the attached diagram rig orientation, parking areas, and access roads, as well as the location of the following:

The reserve pit.

The stockpiled topsoil will not be used for facility berms. All brush removed from the well pad during construction will be stockpiled with the topsoil.

The flare pit or flare box will be located downwind from the prevailing wind direction.

Any drainage that crosses the well location will be diverted around the location by using ditches, water diversion drains or berms. If deemed necessary at the on-site, erosion drains may be installed to contain sediments that could be produced from access roads and well locations.

11. Fencing Requirements:

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched using a stretching device before it is attached to corner posts.

The reserve pit will be fenced on three (3) sides during drilling operations. The fourth side will be put in place when the rig moves off location. The pit will be fenced and maintained until it is backfilled. If drilling operations does not commence within 3 days, the fourth side of the fence will be installed.

12. Reclamation Plan:

Reclamation will follow QEP Energy Company, Uinta Basin Division's Reclamation Plan, September 2009 (QEP Energy Plan) and the BLM Green River District Reclamation Guidelines.

All trash and debris will be removed from the disturbed area.

The disturbed area will be backfilled with subsoil.

Topsoil will be spread to an even, appropriate depth and disced if needed.

Water courses and drainages will be restored.
Erosion control devices will be installed where needed.

Seeding will be done in the fall, prior to ground freeze up.

Seed mix will be submitted to a BLM AO for approval prior to seeding.

Monitoring and reporting will be conducted as stated in QEP Energy Company's Reclamation Plan. Weed control will be conducted as stated in QEP Energy Company's Reclamation Plan.

A reference site and weed data sheet have been established and are included in this application.

Please see attached Weed Data Sheet.

Dry Hole/Abandoned Location:

On lands administered by the BLM abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions may include the reestablishment of irrigation systems; reestablishment of appropriate soil conditions; and, the reestablishment of vegetation as specified.

All disturbed surfaces will be recontoured to approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment.

At final abandonment, the Operator will cap the casing with a metal plate a minimum of 0.25 inch thick. The cap will be welded in place and the well location and identity will be permanently inscribed on the cap. The cap will be constructed with a weep hole. The depth of the permanent cap will be determined at the time of final abandonment. Long-term reclamation will then be applied and will follow the reclamation process described in this plan. When reclamation is deemed successful by the Operator and the BLM, the Operator will request a bond release.

13. Surface Ownership:

The well pad and access road are located on lands owned by:

Bureau of Land Management
170 South 500 East
Vernal, UT 84078

14. Other Information:

Drilling rigs and/or equipment used during drilling operations will not be stacked or stored on Federal lands or State administered lands after the conclusion of drilling operations or at any other time without authorization by the BLM Authorized Officer. If BLM authorization is obtained, such storage is only a temporary measure.

A Class III archeological survey was conducted by Montgomery Archaeology Consultants. A copy of this report was submitted on December 17, 2012, **State of Utah Antiquities Report U-12-MQ-0683bp** by Montgomery Archaeology Consultants. Cultural resource clearance has been recommended for this project.

A paleontological survey was conducted by Intermountain Paleo Consulting. A copy of this report was submitted on July 7, 2011, Report **No. IPC 11-60** by Stephen D. Sandau. Due to the number of fossils found during this survey, it is recommended that a permitted paleontologist be present to monitor the construction process of the well pad, access road, pipeline and power line. QEP Energy Company will provide paleo monitor for this project.

A habitat assessment and inventory was conducted in August 2012 by Bowen Collins & Associates. No horseshoe milkvetch populations or individuals were located during the surveys within the proposed RW 34-14AGR, 300' buffer zone or adjacent habitat. This proposed action would not impact any BLM sensitive species at this time.

Per the onsite meeting on August 30, 2012, the following items were requested/discussed.

This well is being twinned on well location RW 34-14A.

There is 4" topsoil.

API Well Number: 43047534390000

Lessee's or Operator's Representative & Certification:

Jan Nelson
Permit Agent
QEP Energy Company
11002 East 17500 South
Vernal, UT 84078
(435) 781-4331

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

QEP Energy Company is considered to be the operator of the subject well. QEP Energy Company agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104.2 for lease activities is being provided by Bond No. ESB000024

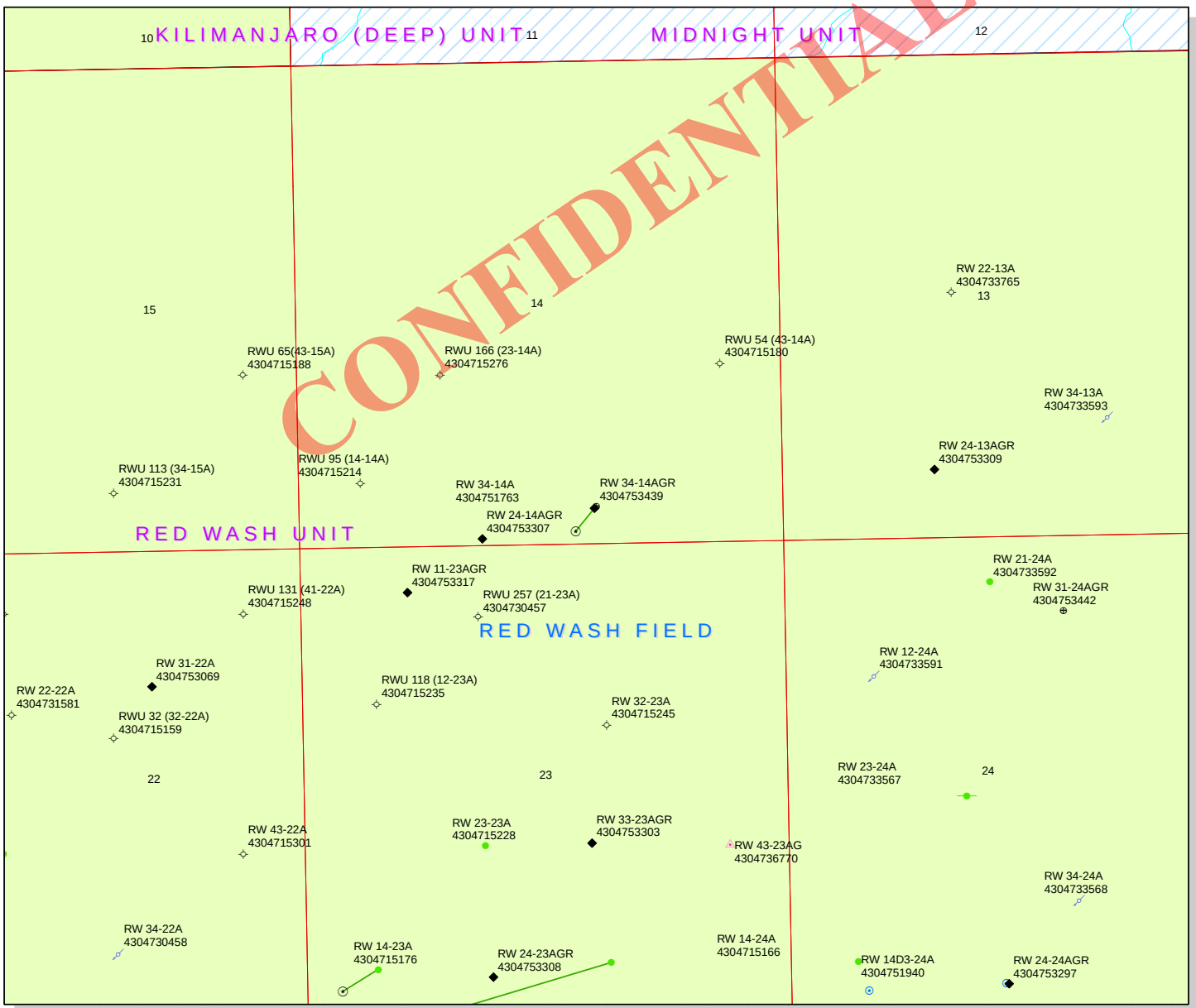
I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operations; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Jan Nelson

Jan Nelson

12/19/2012
Date

API Well Number: 43047534390000



API Number: 4304753439

Well Name: RW 34-14AGR

Township T07.0S Range R22.0E Section 14

Meridian: SLBM

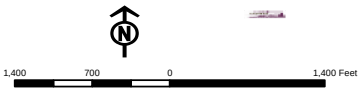
Operator: QEP ENERGY COMPANY

Map Prepared:
Map Produced by Diana Mason

Units
STATUS
ACTIVE
EXPLORATORY
GAS STORAGE
NF PP OIL
NF SECONDARY
PI OIL
PP GAS
PP GEOTHERML
PP OIL
SECONDARY
TERMINATED

Fields
STATUS
Unknown
ABANDONED
ACTIVE
COMBINED
INACTIVE
STORAGE
TERMINATED

Wells Query
Status
APD - Aproved Permit
DRL - Spuded (Drilling Commenced)
GIW - Gas Injection
GS - Gas Storage
LOC - New Location
OPS - Operation Suspended
PA - Plugged Abandoned
PGW - Producing Gas Well
POW - Producing Oil Well
SGW - Shut-in Gas Well
SOW - Shut-in Oil Well
TA - Temp. Abandoned
TW - Test Well
WDW - Water Disposal
WIW - Water Injection Well
WSW - Water Supply Well
Bottom Hole Location - OilGasDb



1:13,484

RECEIVED: December 20, 2012

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

January 2, 2013

Memorandum

To: Assistant Field Office Manager Minerals,
Vernal Field Office

From: Michael Coulthard, Petroleum Engineer

Subject: 2012 Plan of Development Red Wash Unit,
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2012 within the Red Wash Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ Green River)		
43-047-53438	RW 42-13AGR	Sec 13 T07S R22E 1511 FNL 0453 FEL
43-047-53439	RW 34-14AGR	Sec 14 T07S R22E 0420 FSL 2050 FEL
43-047-53440	RW 23-19BGR	Sec 19 T07S R23E 1790 FSL 1913 FWL
43-047-53441	RW 24-25AGR	Sec 25 T07S R22E 0752 FSL 1976 FWL
43-047-53442	RW 31-24AGR	Sec 24 T07S R22E 0822 FNL 2237 FEL
43-047-53445	RW 22-18BGR	Sec 18 T07S R23E 1789 FNL 1886 FWL
43-047-53454	RW 43-20BGR	Sec 20 T07S R23E 1655 FSL 0538 FEL

The following well has been modified to be drilled directionally (please see our memo dated June 29, 2011).

API #	WELL NAME	LOCATION
(Proposed PZ Mesaverde)		
43-047-51721	RW 43-20B	Sec 20 T07S R23E 1637 FSL 0562 FEL
	BHL	Sec 20 T07S R23E 1462 FSL 0952 FEL

This office has no objection to permitting the wells at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard
DN: cn=Michael L. Coulthard, o=Bureau of Land Management, ou=Branch of Minerals, email=Michael_Coulthard@blm.gov, c=US
Date: 2013.01.02 11:05:29 -07'00'

bcc: File - Red Wash Unit
Division of Oil Gas and Mining
Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:1-2-13

RECEIVED: January 03, 2013

API Well Number: 43047534390000

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/19/2012
API NO. ASSIGNED: 43047534390000
WELL NAME: RW 34-14AGR
OPERATOR: QEP ENERGY COMPANY (N3700)
PHONE NUMBER: 435 781-4331
CONTACT: Jan Nelson

PROPOSED LOCATION: SWSE 14 070S 220E
Permit Tech Review: ☑

SURFACE: 0420 FSL 2050 FEL
Engineering Review: ☐

BOTTOM: 0420 FSL 2050 FEL
Geology Review: ☑

COUNTY: UINTAH
LATITUDE: 40.20535
LONGITUDE: -109.40506
UTM SURF EASTINGS: 635738.00
NORTHINGS: 4451769.00
FIELD NAME: RED WASH
LEASE TYPE: 1 - Federal
LEASE NUMBER: UTU0569
PROPOSED PRODUCING FORMATION(S): GREEN RIVER
SURFACE OWNER: 1 - Federal
COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** FEDERAL - ESB000024
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** 49-251/49-2153
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

Commingling Approved

LOCATION AND SITING:

- ☐ **R649-2-3.**

Unit: RED WASH

- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☑ **Drilling Unit**

Board Cause No: Cause 187-07
Effective Date: 9/18/2001
Siting: Suspends General Siting

- ☐ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason

RECEIVED: January 08, 2013

GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

****

Well Name: RW 34-14AGR
API Well Number: 43047534390000
Lease Number: UTU0569
Surface Owner: FEDERAL
Approval Date: 1/8/2013

Issued to:
QEP ENERGY COMPANY, 11002 East 17500 South, Vernal, Ut 84078

Authority:
Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 187-07. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284
  (please leave a voicemail message if not available)
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website
  at http://oilgas.ogm.utah.gov

Reporting Requirements:
All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

Approved By:

For John Rogers
Associate Director, Oil & Gas

Form 3160-3
(August 2007)

RECEIVED
JAN 03 2013
BLM

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

CONFIDENTIAL

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. UTU0569
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No. 890007610
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone	8. Lease Name and Well No. RW 34-14AGR
2. Name of Operator QEP ENERGY COMPANY Contact: JAN NELSON E-Mail: jan.nelson@qepres.com	9. API Well No. 43-047 53439
3a. Address 11002 EAST 17500 SOUTH VERNAL, UT 84078 / 3b. Phone No. (include area code) Ph: 435-781-4331 Fx: 435-781-4395	10. Field and Pool, or Exploratory RED WASH
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface SWSE 420FSL 2050FEL 40.205375 N Lat, 109.405111 W Lon At proposed prod. zone SWSE 420FSL 2050FEL 40.205375 N Lat, 109.405111 W Lon	11. Sec., T., R., M., or Blk. and Survey or Area Sec 14 T7S R22E Mer SLB
14. Distance in miles and direction from nearest town or post office* 29 MILES SOUTH OF VERNAL, UT RECEIVED	12. County or Parish UINTAH / 13. State UT
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 420 / 16. No. of Acres in Lease 640.00 MAY 01 2013	17. Spacing Unit dedicated to this well 40.00
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1350 / 19. Proposed Depth 6521 MD DIV. OF OIL, GAS & MINING	20. BLM/BIA Bond No. on file ESB000024
21. Elevations (Show whether DF, KB, RT, GL, etc. 5208 GL / 22. Approximate date work will start 04/01/2013	23. Estimated duration 7 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) JAN NELSON Ph: 435-781-4331	Date 12/19/2012
Title PERMIT AGENT		
Approved by (Signature)	Name (Printed/Typed) Jerry Kenczka	Date APR 23 2013
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Electronic Submission #166995 verified by the BLM Well Information System
For QEP ENERGY COMPANY, sent to the Vernal
Committed to AFMSS for processing by ROBIN R. HANSEN on 01/09/2013 ()

NOTICE OF APPROVAL

UDOGM

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

NOS 8/24/12

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 South 500 East VERNAL, UT 84078 (435) 781-4400

CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	**QEP ENERGY COMPANY**	**Location:**	**SWSE, Sec. 14, T7S, R22E**
Well No:	**RW 34-14AGR**	**Lease No:**	**UTU-0569**
API No:	**43-047-53439**	**Agreement:**	

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.

- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.

- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

- QEP Energy Company to drill **one oil well** RW **34-14AGR, Section** 14, T. 7 S., R. 22 E., Uintah County, Utah. The project area is located approximately 25 miles south of Vernal, Utah.

- The construction of the wells and access roads will result in no new surface disturbance.
- The reserve pits will be fenced on three sides prior to drilling activity and closed off on the fourth side after drilling is finished. The reserve pits for the wells will be lined with a 20 ml liner with felt.
- A dike will be constructed around those production facilities that contain fluids. The dikes will be constructed of compacted subsoil. They will be impervious, hold 10 percent more than the capacity of the largest tank, and be independent of the back cut.

- The project would include the construction/installation of a wellhead, two storage tanks; spoil dirt stockpile(s), surface material stockpile(s), and a reserve pit for each well.

- All permanent (meaning on site for six months or longer) structures will be painted Covert Green to match the surrounding landscape color unless otherwise authorized. This will include all facilities except those required to comply with Occupational Safety and Health Act (OSHA) regulations.
- If dry, the wells will be plugged and abandoned as per BLM and State of Utah requirements.
- Approximately 1,728 feet of overhead power will be installed along access roads or existing pipeline routes.

- The operator will control noxious/invasive weeds along their roads, pipelines, well sites, or other applicable facilities by the application of herbicides or by mechanical removal until reclamation is considered to be successful by the authorized officer (AO) and the bond for the well is released. A list of noxious weeds will be obtained from the BLM or the appropriate county extension office. On BLM-administered land, the operator will submit a Pesticide Use Proposal and obtain approval prior to the application of herbicides, other pesticides, or possible hazardous chemicals.

- Immediately upon well completion, the location and surrounding area shall be cleared of all unused tubing, equipment, debris, materials, and trash. Any hydrocarbons in the pit will be removed in accordance with 43 CFR 3162.7-1.

- The reserve pit and the portion of the well not needed for production facilities/operations shall be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 120 days from the date of well completion, or as soon as environmental conditions allow. The stockpiled pit topsoil will then be spread over the pit area and broadcast-seeded/drill seeded (preferred method) with a seed mix submitted to the BLM Authorized Officer (AO) for approval prior to seeding. Seeding will be done in the fall prior to winter freezing of the soil. The seed mixture shall be worked into the topsoil with a drill seeder, bulldozer or other heavy equipment. If initial seeding is not successful, reseeding may be required.
- Once the well is plugged and facilities are removed and abandoned, the topsoil shall be stripped and stockpiled off of the location, and the well site, pipelines, and access roads will be returned to natural contours. The topsoil shall be respread, and the location seeded with the mixture submitted to the BLM AO. The seed mixture shall be worked into the topsoil with a drill seeder, bulldozer or other heavy equipment.
- Interim reclamation, final reclamation, and monitoring of reclaimed areas will be completed in accordance with the Questar Exploration and Production Company, Uinta Basin Division's Reclamation Plan, September 2009 on file with the Vernal Field Office of the BLM.
- Prior to any surface disturbance, vegetative monitoring locations and reference sites will be identified by QEP and approved by the BLM AO. Vegetation monitoring protocol will be developed by QEP and approved by the BLM AO prior to implementation of revegetation techniques and will be designed to monitor % basal vegetative cover.
- Revegetated areas will be inspected annually and monitored to document location and extent of areas with successful revegetation, and areas needing further reclamation (for a period of 5 years after construction completion). A reclamation report will be submitted to the AO by March 31 of each year.
- No surface construction or drilling activities shall occur from March 1 through August 15. A Red Tailed Hawk nest is located within 0.5 miles of the location. An exception to this COA may be requested in writing by the operator about 1 month prior to the desired activity. A survey then will be conducted by a BLM biologist or a qualified biologist contracted by the operator.
- A muffler will be used on the pump-jack upon completion in order to reduce noise levels.
- QEP will educate its contractors and employees about the relevant federal regulations intended to protect cultural resources. All vehicular traffic, personnel movement, construction and restoration activities shall be confined to areas cleared by the site inventory and to existing roads. In the event historic or archaeological resources are uncovered during construction, work will stop immediately and the appropriate BLM AO will be notified.
- QEP will educate its contractors and employees about the relevant federal regulations intended to protect paleontological resources. All vehicular traffic, personnel movement, construction, and restoration activities shall be confined to areas cleared by the site inventory and to existing roads. If any potential paleontological resources are uncovered during construction, work will stop immediately in the area and the appropriate BLM AO will be notified.
- Scientifically important fossils were found at well sites, RW 34-14A(IPC #11-60, July 7, 2011). A permitted paleontologist will be required to monitor all construction.
-

DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- Cement for the production casing shall be brought up to a minimum of 200 feet above the surface casing shoe.
- A CBL shall be run from TD to TOC in the Production Casing.
- Variances shall be granted as requested in Section 6 of the Drilling Program.
- Gamma Ray Log shall be run from Total Depth to the Surface.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

- **Please submit an electronic copy of all other logs run on this well by CD (compact disc). This submission will supersede the requirement for submittal of paper logs to the BLM.**

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.

- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:

    - Operator name, address, and telephone number.

    - Well name and number.

    - Well location (¼¼, Sec., Twn, Rng, and P.M.).

    - Date well was placed in a producing status (date of first production for which royalty will be paid).

    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).

    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.

    - Unit agreement and/or participating area name and number, if applicable.

    - Communitization agreement number, if applicable.

- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.

- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid,

and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.

- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.

- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER:
UTU0569

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:
RED WASH

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
RW 34-14AGR

2. NAME OF OPERATOR:
QEP ENERGY COMPANY

9. API NUMBER:
43047534390000

3. ADDRESS OF OPERATOR:
11002 East 17500 South , Vernal, Ut, 84078

PHONE NUMBER:
303 308-3068 Ext

9. FIELD and POOL or WILDCAT:
RED WASH

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0396 FSL 2068 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSE Section: 14 Township: 07.0S Range: 22.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☑ SPUD REPORT Date of Spud: 5/28/2013	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

ON 5/28/2013- QEP ENERGY COMPANY SET 40' OF 14" CONDUCTOR PIPE AND CEMENTED WITH READY MIX.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
May 29, 2013

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Valyn Davis	435 781-4369	Regulatory Affairs Analyst
SIGNATURE		**DATE**
N/A		5/29/2013

RECEIVED: May. 29, 2013

BLM - Vernal Field Office - Notification Form

Operator QEP ENERGY Rig Name/# PETE MARTIN #1
Submitted By DAVID REID Phone Number 435-828-0396
Well Name/Number RW 34-14AGR
Qtr/Qtr SW/SE Section 14 Township 7S Range 22E
Lease Serial Number UTU0569
API Number 43-047-53439

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 5/28/2013 08:00 AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☒ Other

Date/Time _____ _____ AM ☐ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time _____ _____ AM ☐ PM ☐

Remarks WILL BE DRILLING AND SETTING 40FT OF 14" CONDUCTOR.

RECEIVED
MAY 23 2013
DIV. OF OIL, GAS & MINING

Sundry Number: 38109 API Well Number: 43047534390000

FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER:
UTU0569

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:
RED WASH

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
RW 34-14AGR

2. NAME OF OPERATOR:
QEP ENERGY COMPANY

9. API NUMBER:
43047534390000

3. ADDRESS OF OPERATOR:
11002 East 17500 South , Vernal, Ut, 84078

PHONE NUMBER:
303 308-3068 Ext

9. FIELD and POOL or WILDCAT:
RED WASH

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0396 FSL 2068 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSE Section: 14 Township: 07.0S Range: 22.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 5/21/2013	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

QEP ENERGY COMPANY REQUESTS TO CHANGE THE SURFACE HOLE LOCATION FOR THE RW 34-14AGR. DUE TO THE DRILLING ORDER AND TO INSURE A SAFE DRILLING LOCATION QEP ENERGY COMPANY REQUESTS THE NEW SURFACE LOCATION TO BE AS FOLLOWS: NEW SURFACE HOLE LOCATION FOOTAGES: 396' FSL, 2068' FEL, SWSE, SECTION 14, T7S, R22E, LATITUDE: 40.205308, LONGITUDE: 109.405178, NO ADDITIONAL SURFACE DISTURBANCE IS REQUIRED FOR THIS ACTION.

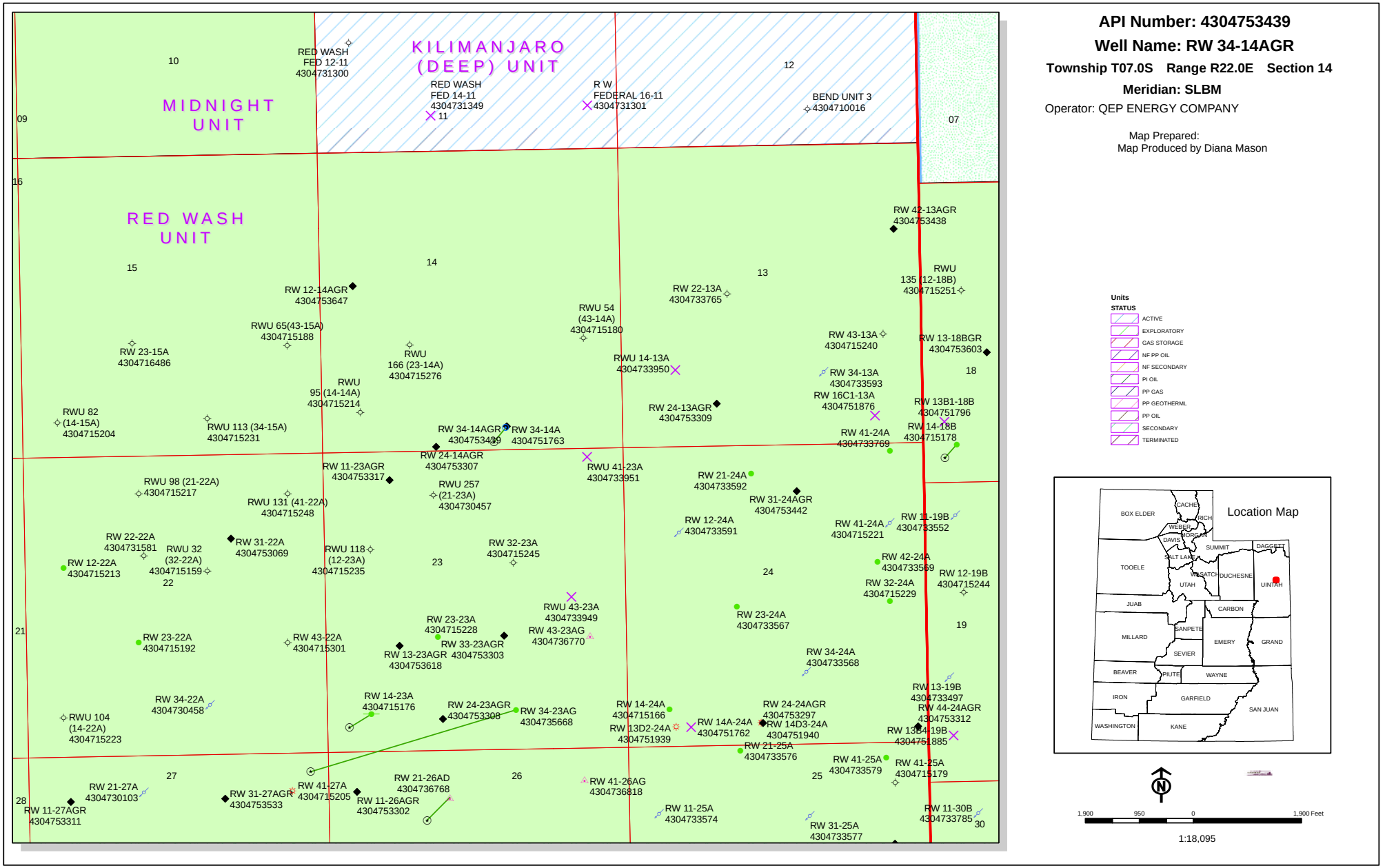
Approved by the Utah Division of Oil, Gas and Mining

Date: June 05, 2013

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Valyn Davis	435 781-4369	Regulatory Affairs Analyst
SIGNATURE		**DATE**
N/A		5/21/2013

RECEIVED: May. 21, 2013



API Number: 4304753439

Well Name: RW 34-14AGR

Township T07.0S Range R22.0E Section 14

Meridian: SLBM

Operator: QEP ENERGY COMPANY

Map Prepared:
Map Produced by Diana Mason

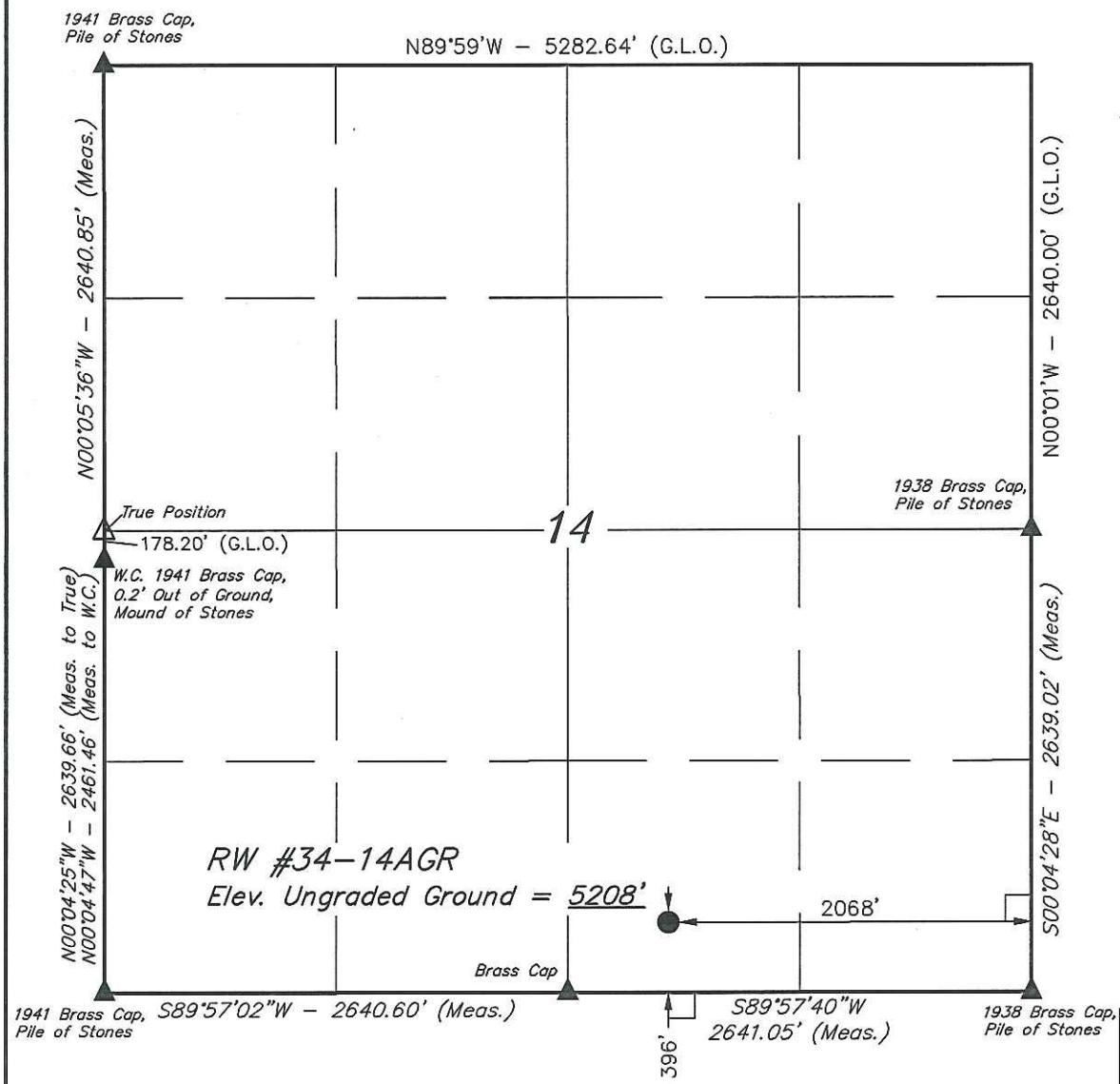
Units
STATUS
- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

1,900 950 0 1,900 Feet

1:18,095

RECEIVED: Jun. 04, 2013

T7S, R22E, S.L.B.&M.



QEP ENERGY COMPANY

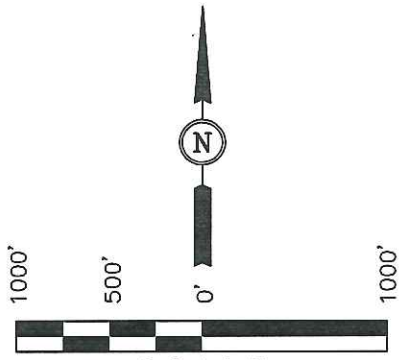
Well location, RW #34-14AGR, located as shown in the SW 1/4 SE 1/4 of Section 14, T7S, R22E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REV.: 05-16-13 K.O.
REV.: 10-09-12 J.I.

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST – VERNAL, UTAH 84078
(435) 789-1017

SCALE: 1" = 1000'	DATE SURVEYED: 04-29-11	DATE DRAWN: 05-02-11
PARTY: A.F. B.A. K.O.	REFERENCES: G.L.O. PLAT	
WEATHER: COLD	FILE: QEP ENERGY COMPANY	

LEGEND:

- ∟ = 90° SYMBOL
- ● = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

NAD 83 (SURFACE LOCATION)	
LATITUDE	= 40°12'19.11" (40.205308)
LONGITUDE	= 109°24'18.64" (109.405178)
NAD 27 (SURFACE LOCATION)	
LATITUDE	= 40°12'19.24" (40.205344)
LONGITUDE	= 109°24'16.17" (109.404492)

Sundry Number: 38109 API Well Number: 43047534390000

Sundry Number: 38239 API Well Number: 43047534390000

FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER:
UTU0569

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:
RED WASH

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
RW 34-14AGR

2. NAME OF OPERATOR:
QEP ENERGY COMPANY

9. API NUMBER:
43047534390000

3. ADDRESS OF OPERATOR:
11002 East 17500 South , Vernal, Ut, 84078

PHONE NUMBER:
303 308-3068 Ext

9. FIELD and POOL or WILDCAT:
RED WASH

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0396 FSL 2068 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWSE Section: 14 Township: 07.0S Range: 22.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 5/28/2013	☐ ACIDIZE	✓ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

QEP ENERGY COMPANY REQUESTS TO CHANGE THE DEPTH OF THE SURFACE CASING ON THE ABOVE CAPTIONED WELL. THE CHANGE WILL BE AS FOLLOWS: -RUN 8 5/8" SURFACE CASING FROM SURFACE TO 500'. ALL OTHER ASPECTS OF THE ORIGINAL APPROVAL WILL STAY THE SAME.

Accepted by the Utah Division of Oil, Gas and Mining

Date: June 12, 2013

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Valyn Davis	435 781-4369	Regulatory Affairs Analyst
SIGNATURE		**DATE**
N/A		5/28/2013

RECEIVED: May. 28, 2013

CONFIDENTIAL

BLM - Vernal Field Office - Notification Form

Operator QEP ENERGY Rig Name/# SST 88
Submitted By Dave Harding Phone Number 435-828-0396
Well Name/Number RW 34-14AGR
Qtr/Qtr SW/SE Section 14 Township 7S Range 22E
Lease Serial Number UTU0569
API Number ~~43-047-56439~~ 43 047 53439

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time _____ _____ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

☐ Surface Casing
☐ Intermediate Casing
☐ Production Casing
☐ Liner
☐ Other

Date/Time _____ _____ AM ☐ PM ☐

BOPE

☒ Initial BOPE test at surface casing point
☐ BOPE test at intermediate casing point
☐ 30 day BOPE test
☐ Other

RECEIVED
JUN 26 2013
DIV. OF OIL, GAS & MINING

Date/Time 6/6/2013 6:00 AM ☐ PM ☒

Remarks We will be pressure testing surface casing

_____

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU0569

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: RED WASH

1. TYPE OF WELL Oil Well

8. WELL NAME and NUMBER: RW 34-14AGR

2. NAME OF OPERATOR: QEP ENERGY COMPANY

9. API NUMBER: 43047534390000

3. ADDRESS OF OPERATOR: 11002 East 17500 South , Vernal, Ut, 84078

PHONE NUMBER: 303 308-3068 Ext

9. FIELD and POOL or WILDCAT: RED WASH

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 0396 FSL 2068 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWSE Section: 14 Township: 07.0S Range: 22.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☑ SUBSEQUENT REPORT Date of Work Completion: 7/12/2013	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☑ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THIS WELL COMMENCED PRODUCTION ON JULY 12, 2013 @ 10:00 A.M.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
August 08, 2013

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Valyn Davis	435 781-4369	Regulatory Affairs Analyst
SIGNATURE		**DATE**
N/A		7/16/2013

RECEIVED: Jul. 16, 2013

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ (highlight changes) FORM 8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU0569

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WELL: OIL WELL ☑ GAS WELL ☐ DRY ☐ OTHER

7. UNIT or CA AGREEMENT NAME: RED WASH

b. TYPE OF WORK: NEW WELL ☑ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER

8. WELL NAME and NUMBER: RW 34-14 AGR

2. NAME OF OPERATOR: QEP ENERGY COMPANY

9. API NUMBER: 4304753439

3. ADDRESS OF OPERATOR: 11002 E. 17500 S. CITY VERNAL STATE UT ZIP 84078

PHONE NUMBER: (435) 781-4320

10 FIELD AND POOL, OR WILDCAT: RED WASH

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE: SWSE, 396' FSL, 2068' FEL
AT TOP PRODUCING INTERVAL REPORTED BELOW: SWSE, 396' FSL, 2068' FEL
AT TOTAL DEPTH: SWSE, 396' FSL, 2068' FEL

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 14 7S 22E

12. COUNTY: UINTAH

13. STATE: UTAH

14. DATE SPUDDED: 5/28/2013

15. DATE T.D. REACHED: 6/11/2013

16. DATE COMPLETED: 7/24/2013 ABANDONED ☐ READY TO PRODUCE ☑

17. ELEVATIONS (DF, RKB, RT, GL): 5208' GL

18. TOTAL DEPTH: MD 6,505 TVD 6,504

19. PLUG BACK T.D.: MD TVD

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)
TRIPLE COMBO, CBL, RST

23.
WAS WELL CORED? NO ☑ YES ☐ (Submit analysis)
WAS DST RUN? NO ☑ YES ☐ (Submit report)
DIRECTIONAL SURVEY? NO ☑ YES ☐ (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
12.25	8.625 HCK	32	0	530		G 375	77		
7.875	5.5 L-80	17	0	6,497		1,1[illegible]	385	1904	

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2.875	6,177							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) GREEN RIVER	5,288	6,096		
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
5,288 6,096	.42	62	Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
5,288 - 6,096	911 BBLS 25# DELTA 140; 33,700 LBS 20/40 SAND, 8,770 LBS 16/30 SAND.

29. ENCLOSED ATTACHMENTS:
☐ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☐ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☑ OTHER: OPS SUMMARY

30. WELL STATUS: POW

(5/2000)

(CONTINUED ON BACK)

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
7/12/2013	7/30/2013	24		42	0	557	GPU

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:
	20	6					42	0	557	

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:

CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

USED ON LEASE

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				GREEN RIVER	3,009
				MAHOGANY BENCH	3,876

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) BENNA MUTH TITLE REGULATORY ASSISTANT - CONTRACT

SIGNATURE Benna Muth DATE 8/12/2013

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

(5/2000)

QEP Energy Company

Daily Activity and Cost Summary

Well Name: RW 34-14AGR

API	Surface Legal Location	Field Name	County	State	Well Configuration Type
43-047-53439	S14-T7S-R22E	RED WASH	UINTAH	UTAH	Vertical

Unique Well ID	Ground Elevation (ft)	Casing Flange Elevation (ft)	Current KB to GL (ft)	KB to CF (ft)	Spud Date	Dry Hole TD Date
UT101881	5,201.1	5,201.10	30.00	30.00	5/30/2013 07:00	6/15/2013 06:00

Job Category	Primary Job Type	Secondary Job Type	Objective
DRILLING	AFE - DRL-DR (Drilling)	RE-ENTER	

Start Date	Job End Date
5/31/2013	6/15/2013

Purpose

Summary

Contractor	RIG	Rig Type
Pete Martin Drilling	PETE MARTIN 1	BUCKET RIG
Pro Petro	AIR 8	AIR RIG
SST Energy	SST 88	TOP DRIVE

RPT #	Start Date	Summary
1	5/29/2013	PRE SPUD COSTS
2	5/30/2013	DRILL AND SET 40 FT OF CONDUCTOR
3	6/1/2013	DRILLED 40-510 FT, SET AND CEMENTED 8 5/8 SURFACE CASING AT 502 FT KB
4	6/3/2013	MOVE IN RIG
5	6/4/2013	MOVE AND RIG UP WITH WESTROC TRUCKING. TRAILERS, MUD TANKS, BACK END SET. SUBS SET AND STACKED. 70% SET IN, 80% MOVED, 30% RIGGED UP. 80% OFF OLD LOCATION-TUBULARS, JUNK TUBS, MATS, SKID RAILS LEFT
6	6/5/2013	WAIT ON DAYLIGHT
7	6/6/2013	RAISE DERRICK, PICK UP AND RIG UP TOP DRIVE, GENERAL RIG UP BY HAND. NIPPLE UP BOPE. RIG ON DAYRATE @ 23:00 HRS 6/6/13. TEST CASING. TEST BOPE.
8	6/7/2013	P/U BHA. TIH. DRILL SHOE TRACK. FIT TO 10# EMW. DRILL F/ 540 T/ 2277. SHORT TRIP.
9	6/8/2013	WIPER TRIP, CHANGE MOTOR, REAM FROM 2364-2777, DRILL FROM 2777/ 3627. LOST 100 BBL @ 3200. SHORT TRIP 14 STDS. DRILL F/ 3627 T/ 3722.
10	6/9/2013	DRILL F/ 3722 T/ 5052. SERVICE RIG. CIRCULATE & PUMP LCM SWEEPS @ 4290 & 4482.
11	6/10/2013	DRILL F/ 5052 T/ 5939. BACK REAM & FIGHT LOSSES @ 5052,5432,5717 & 5812.
12	6/11/2013	DRILL F/5939 T/ 6505. CHANGE WASHPIPE, RIG SERVICE, FIGHT LOST CIRCULATION @ 6192 & 6505. TD @ 21:05 6/11/13.CIRCULATE HIGH VIS SWEEP. PULL 10 STDS. WELL FLOWING. TRIP IN. CIRCULATE BTMS UP. WIPER TRIP TO 3000 FT.
13	6/12/2013	TIH WASH 180 FT TO BOTTOM CIRC & BUILD 200 BBL'S OF 9.0PPG MUD & PUMP IT POOH TO 3625 FT CIRC & BUILD 200 BBL'S OF 9.0 PPG MUD POOH TO HWDP TIH CIRC & PUMP SWEEPS TRIP TO BOTTOM & CIRC & RAISE MUD WT TO 9.0 FLOW CHECK WELL FLOWING 7.1 BBL'S PER HR. CIRC & RAISE WT TO 9.3 PPG FLOW CHECK WELL.
14	6/13/2013	TRIP OUT FOR LOGS RUN LOGS TO 1721 FEET WOULD NOT GO R/D LOGGERS AND TRIP IN THE HOLE CIR & COND MUD LAY DOWN D/P & RIG UP & RUN 5 1/2" CAASING
15	6/14/2013	PJSM & RIG UP CASING CREWS , RUN 144 JTS OF 5 1/2" , 17# L-80 CASING LANDED @ 6467 FT PJSM RIG UP HALCO CEMENT CASING BUMP PLUGS FLOATS HELD RIG DOWN HALCO LAY DOWN LANDING JT SET PACK OFF ASSEMBLY NIPPLE DOWN & CLEAN PIT RIG RELEASED @ 0600

QEP Energy Company

Stimulations

Well Name: RW 34-14AGR

API	Surface Legal Location	Field Name	County	State	Well Configuration Type
43-047-53439	S14-T7S-R22E	RED WASH	UINTAH	UTAH	Vertical

Unique Well ID	Gr Elev (ft)	Current Elevation	KB to CF (ft)	Spud Date	Dry Hole TD Date	Total Depth (All) (ft, KB)
UT101881	5,201.1	5,231.10, SST 88 - KB 30	30.00	5/30/2013 07:00	6/15/2013 06:00	Original Hole - 6,505.0

Production Casing

Csg Des	Run Date	Set Depth (ft, KB)	OD (in)	Wt/Len (lb/ft)	Grade
PRODUCTION	6/14/2013	6,497.0	5 1/2	17.00	L-80

Perforations

Date	Completion	Top (ft, KB)	Btm (ft, KB)	Current Status
7/9/2013	Green River, Original Hole	5,902.0	5,906.0	Open - Flowing (5,902.0 - 5,906.0)
7/9/2013	Green River, Original Hole	6,094.0	6,096.0	Open - Flowing (6,094.0 - 6,096.0)

Stimulations & Treatments

Date	Type	Stim/Treat Company	Completion	Job
7/10/2013	Sand Frac	Halliburton Energy Services	Green River, Original Hole	AFE - DRL-CT (completion), 6/25/2013 06:00

Pre Treatment Shut-in Pressure (psi)	Instant. Shut-in Pressure (psi)	Proppant In Formation (lb)	Proppant In Wellbore (lb)	Shut-in Time Final (hr)

Comment

Stim/Treat Fluids

25# Delta 140

Fluid Name	Fluid Type	Description
25# Delta 140	Fresh Water	

Additive	Units	Concentration (%)

Stim/Treat Stages

1, Sand

Stage Number	Stage Type	Start Date	End Date	Top Depth (ft, KB)	Bottom Depth (ft, KB)
1	Sand	7/10/2013 06:00	7/10/2013 07:00	5,902.0	6,096.0

Casing Pressure Start (psi)	Casing Pressure End (psi)	Clean Volume Pumped (bbl)
0.0	2,376.0	322.00

Stim/Treat Fluid	Comment
25# Delta 140, Fresh Water	Frac Stage 1 (Green River 5,902' – 6,096') with 322 BBLS 25# Delta 140 carrying 11,950 LBS 20/40 premium white sand and 1,380 LBS 16/30 premium white sand. AVG. Rate = 11.56 BPM and AVG. pressure = 1,891 PSI. ISIP – 2,376 PSI. FG - 0.83

Additive	Type	Amount	Units	Sand Size	Conc (lb/gal)	Note
Proppant		1,380.0	lb	16/30	5.00	
Proppant	Premium white	11,950.0	lb	20/40	1.00	

2, <stagetyp>

Stage Number	Stage Type	Start Date	End Date	Top Depth (ft, KB)	Bottom Depth (ft, KB)
2		7/10/2013 08:00	7/10/2013 09:00	5,902.0	6,096.0

Casing Pressure Start (psi)	Casing Pressure End (psi)	Clean Volume Pumped (bbl)
300.0	1,742.0	301.00

Stim/Treat Fluid	Comment
25# Delta 140, Fresh Water	Frac Stage 2 (Green River 5,670' – 5,693') with 301 BBLS 25# Delta 140 carrying 9,657 LBS 20/40 premium white sand and 2,943 LBS 16/30 premium white sand. AVG. Rate = 13.69 BPM and AVG. pressure = 1,438 PSI. ISIP – 1,742 PSI. FG - 0.74

Additive	Type	Amount	Units	Sand Size	Conc (lb/gal)	Note
Proppant	Premium white	2,943.0	lb	16/30		
Proppant	Premium white	9,657.0	lb	20/40	1.00	

3, <stagetyp>

Stage Number	Stage Type	Start Date	End Date	Top Depth (ft, KB)	Bottom Depth (ft, KB)
3		7/10/2013 10:00	7/10/2013 11:00	5,902.0	6,096.0

Casing Pressure Start (psi)	Casing Pressure End (psi)	Clean Volume Pumped (bbl)
275.0	1,059.0	288.00

Stim/Treat Fluid	Comment
25# Delta 140, Fresh Water	Frac Stage 3 (Green River 5,288' – 5,388') with 288 BBLS 25# Delta 140 carrying 12,093 LBS 20/40 premium white sand and 4,447 LBS 16/30 premium white sand. AVG. Rate = 13.84 BPM and AVG. pressure = 1,250 PSI. ISIP – 1,059 PSI. FG - 0.63

Additive	Type	Amount	Units	Sand Size	Conc (lb/gal)	Note
Proppant	Premium white	12,093.0	lb	20/40	1.00	
Proppant	Premium white	4,447.0	lb	16/30	5.00	

Perforations

QEP Energy Company

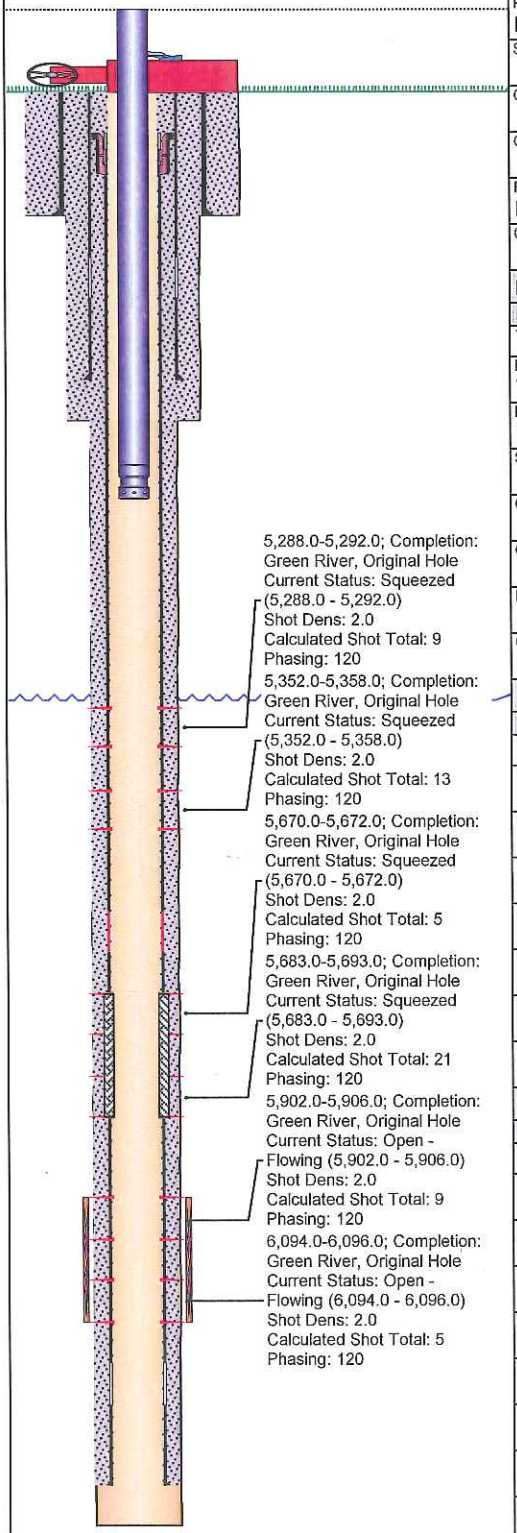
Well Name: RW 34-14AGR

API	Surface Legal Location	Field Name	County	State	Well Configuration Type
43-047-53439	S14-T7S-R22E	RED WASH	UINTAH	UTAH	Vertical

Unique Well ID	Gr Elev (ft)	Current Elevation	KB to CF (ft)	Spud Date	Dry Hole TD Date	Total Depth (All) (ft, KB)
UT101881	5,201.1	5,231.10, SST 88 - KB 30	30.00	5/30/2013 07:00	6/15/2013 06:00	Original Hole - 6,505.0

Vertical - Original Hole, 12/16/2014 12:58:58 PM

Vertical schematic (actual)



Perforations

Date	Completion	Top Depth (ft, KB)	Bottom Depth (ft, KB)
7/10/2013	Green River, Original Hole	5,288.0	5,292.0

Perforation Company	Conveyance Method	Gun Size (in)	Carrier Make
Lone Wolf ELU	Wireline	3 1/8	

Shot Density (shots/ft)	Charge Type	Phasing (°)
2.0		120

Orientation	Orientation Method

Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)

Reference Log: RST, 2,580.0-6,412.0ft, KB

Calculated Shot Total: 9

Perforation Statuses

Date	Status	Com
7/9/2013	Squeezed	

Date	Completion	Top Depth (ft, KB)	Bottom Depth (ft, KB)
7/10/2013	Green River, Original Hole	5,352.0	5,358.0

Perforation Company	Conveyance Method	Gun Size (in)	Carrier Make
Lone Wolf ELU	Wireline	3 1/8	

Shot Density (shots/ft)	Charge Type	Phasing (°)
2.0		120

Orientation	Orientation Method

Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)

Reference Log: RST, 2,580.0-6,412.0ft, KB

Calculated Shot Total: 13

Perforation Statuses

Date	Status	Com
7/9/2013	Squeezed	

Date	Completion	Top Depth (ft, KB)	Bottom Depth (ft, KB)
7/10/2013	Green River, Original Hole	5,670.0	5,672.0

Perforation Company	Conveyance Method	Gun Size (in)	Carrier Make
Lone Wolf ELU	Wireline	3 1/8	

Shot Density (shots/ft)	Charge Type	Phasing (°)
2.0		120

Orientation	Orientation Method

Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)

Reference Log: RST, 2,580.0-6,412.0ft, KB

Calculated Shot Total: 5

Perforation Statuses

Date	Status	Com
7/9/2013	Squeezed	

Date	Completion	Top Depth (ft, KB)	Bottom Depth (ft, KB)
7/10/2013	Green River, Original Hole	5,683.0	5,693.0

Perforation Company	Conveyance Method	Gun Size (in)	Carrier Make
Lone Wolf ELU	Wireline	3 1/8	

Shot Density (shots/ft)	Charge Type	Phasing (°)
2.0		120

Orientation	Orientation Method

Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)

Reference Log: RST, 2,580.0-6,412.0ft, KB

Calculated Shot Total: 21

QEP Energy Company

Perforations

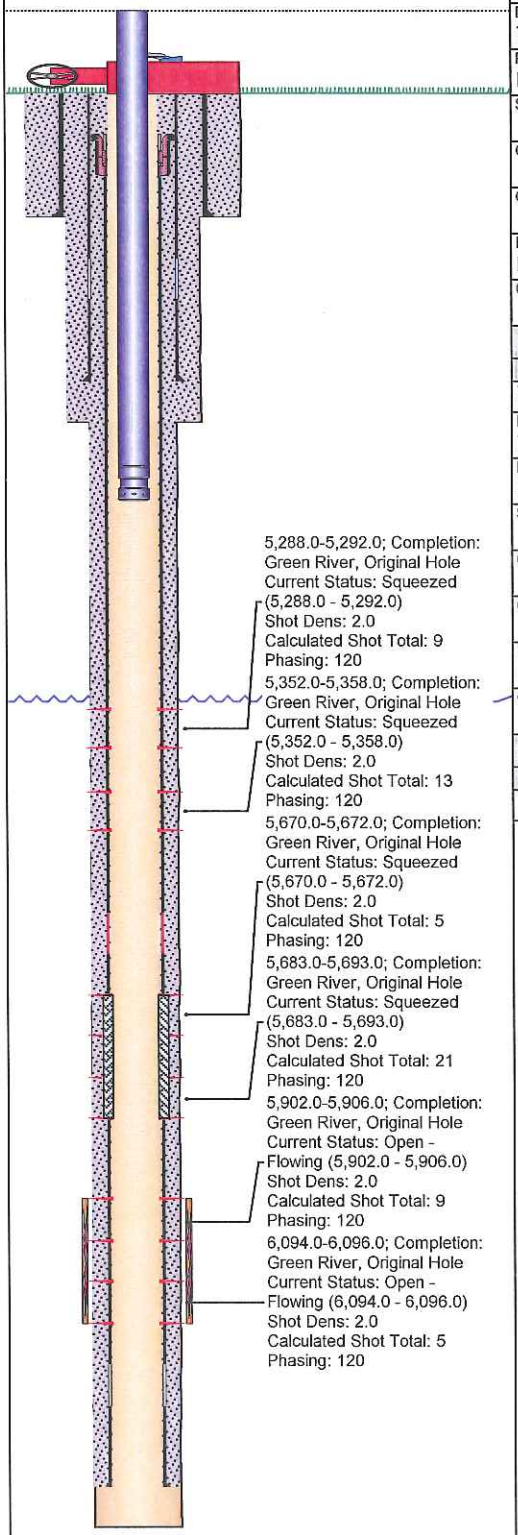
Well Name: RW 34-14AGR

API	Surface Legal Location	Field Name	County	State	Well Configuration Type
43-047-53439	S14-T7S-R22E	RED WASH	UINTAH	UTAH	Vertical

Unique Well ID	Gr Elev (ft)	Current Elevation	KB to CF (ft)	Spud Date	Dry Hole TD Date	Total Depth (All) (ft, KB)
UT101881	5,201.1	5,231.10, SST 88 - KB 30	30.00	5/30/2013 07:00	6/15/2013 06:00	Original Hole - 6,505.0

Vertical - Original Hole, 12/16/2014 12:58:58 PM

Vertical schematic (actual)



Perforation Statuses

Date	Status	Com
7/9/2013	Squeezed	

Date	Completion	Top Depth (ft, KB)	Bottom Depth (ft, KB)
7/9/2013	Green River, Original Hole	5,902.0	5,906.0

Perforation Company	Conveyance Method	Gun Size (in)	Carrier Make
Lone Wolf ELU	Wireline	3 1/8	

Shot Density (shots/ft)	Charge Type	Phasing (°)
2.0		120

Orientation	Orientation Method

Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)

Reference Log: RST, 2,580.0-6,412.0ft, KB

Calculated Shot Total: 9

Perforation Statuses

Date	Status	Com
7/9/2013	Open - Flowing	

Date	Completion	Top Depth (ft, KB)	Bottom Depth (ft, KB)
7/9/2013	Green River, Original Hole	6,094.0	6,096.0

Perforation Company	Conveyance Method	Gun Size (in)	Carrier Make
Lone Wolf ELU	Wireline	3 1/8	

Shot Density (shots/ft)	Charge Type	Phasing (°)
2.0		120

Orientation	Orientation Method

Over/Under Balanced	P Over/Under (psi)	FL MD Before (ft, KB)	FL MD After (ft, KB)	P Surf Init (psi)	P Final Surf (psi)

Reference Log: RST, 2,580.0-6,412.0ft, KB

Calculated Shot Total: 5

Perforation Statuses

Date	Status	Com
7/9/2013	Open - Flowing	

QEP Energy Company

QEP Energy Casing

PRODUCTION

Well Name: RW 34-14AGR

API	Surface Legal Location	Field Name	County	State	Well Configuration Type
43-047-53439	S14-T7S-R22E	RED WASH	UINTAH	UTAH	Vertical

Unique Well ID	Ground Elevation (ft)	Casing Flange Elevation (ft)	Current KB to GL (ft)	KB to CF (ft)	Spud Date	Dry Hole TD Date
UT101881	5,201.1	5,201.10	30.00	30.00	5/30/2013 07:00	6/15/2013 06:00

Wellbore

Wellbore Name	Sidetrack Start Depth (ft, KB)
Original Hole	

Section Des	Size (in)	Act Top (ft, KB)	Act Btm (ft, KB)	Start Date	End Date
CONDUCTOR	20	30.0	70.0	5/30/2013	5/30/2013
SURFACE	12 1/4	70.0	540.0	6/1/2013	6/1/2013
PRODUCTION	7 7/8	540.0	6,505.0	6/1/2013	6/11/2013

Casing

Casing Description	Top Depth (ft, KB)	Set Depth (ft, KB)	Run Date
PRODUCTION	30.4	6,497.0	6/14/2013

Centralizers	Scratchers	Set Tension (kips)	Comment
20			

Casing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Top Thread	Jts	Len (ft)	Top (ft, KB)	Btm (ft, KB)	Mk-up Tq (ft•lb)	Class	Max OD (in)	ID (in)
Liner Hanger	5 1/2	17.00	L-80		1	4.25	30.4	34.6				4.892
Casing Joints	5 1/2	17.00	L-80		122	5,467.48	34.6	5,502.1				4.892
Marker Joint	5 1/2	17.00	L-80		1	3.60	5,502.1	5,505.7				4.892
Casing Joints	5 1/2	17.00	L-80		21	943.56	5,505.7	6,449.3				4.892
Float Collar	5 1/2	17.00	L-80		1	1.10	6,449.3	6,450.4				4.892
Casing Joints	5 1/2	17.00	L-80		1	44.92	6,450.4	6,495.3				4.892
Float Shoe	5 1/2	17.00	L-80		1	1.70	6,495.3	6,497.0				4.892

QEP Energy Company

QEP Energy Casing

SURFACE

Well Name: RW 34-14AGR

API	Surface Legal Location	Field Name	County	State	Well Configuration Type
43-047-53439	S14-T7S-R22E	RED WASH	UINTAH	UTAH	Vertical

Unique Well ID	Ground Elevation (ft)	Casing Flange Elevation (ft)	Current KB to GL (ft)	KB to CF (ft)	Spud Date	Dry Hole TD Date
UT101881	5,201.1	5,201.10	30.00	30.00	5/30/2013 07:00	6/15/2013 06:00

Wellbore

Wellbore Name	Sidetrack Start Depth (ft, KB)
Original Hole	

Section Des	Size (in)	Act Top (ft, KB)	Act Btm (ft, KB)	Start Date	End Date
CONDUCTOR	20	30.0	70.0	5/30/2013	5/30/2013
SURFACE	12 1/4	70.0	540.0	6/1/2013	6/1/2013
PRODUCTION	7 7/8	540.0	6,505.0	6/1/2013	6/11/2013

Casing

Casing Description	Top Depth (ft, KB)	Set Depth (ft, KB)	Run Date
SURFACE	30.0	530.4	6/1/2013

Centralizers	Scratchers	Set Tension (kips)	Comment
5			

Casing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Top Thread	Jts	Len (ft)	Top (ft, KB)	Btm (ft, KB)	Mk-up Tq (ft•lb)	Class	Max OD (in)	ID (in)
Casing Joints	8 5/8	32.00	HCK55		11	456.42	30.0	486.4				7.921
Float Collar	8 5/8	32.00	HCK55		1	1.42	486.4	487.8				7.921
Casing Joints	8 5/8	32.00	HCK55		1	41.68	487.8	529.5				7.921
Guide Shoe	8 5/8	32.00	HCK55		1	0.91	529.5	530.4				7.921

QEP Energy Company

QEP Energy Cement

SURFACE CASING CEMENT

Well Name: RW 34-14AGR

API	Surface Legal Location	Field Name	County	State	Well Configuration Type
43-047-53439	S14-T7S-R22E	RED WASH	UINTAH	UTAH	Vertical

Unique Well ID	Ground Elevation (ft)	Casing Flange Elevation (ft)	Current KB to GL (ft)	KB to CF (ft)	Spud Date	Dry Hole TD Date
UT101881	5,201.1	5,201.10	30.00	30.00	5/30/2013 07:00	6/15/2013 06:00

SURFACE CASING CEMENT, Casing, 6/1/2013 16:00

Type	Cementing Start Date	Cementing End Date	Wellbore	String	OD (in)
Casing	6/1/2013	6/1/2013	Original Hole	SURFACE, 530.4ft, KB	8 5/8

Cementing Company	Evaluation Method	Cement Evaluation Results
PRO-PETRO	Returns to Surface	

Comment

1, 30.0-540.0ft, KB

Top Depth (ft, KB)	Bottom Depth (ft, KB)	Full Return?	Top Plug?	Bottom Plug?
30.0	540.0	No	Yes	No

Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)	Final Pump Pressure (psi)	Plug Bump Pressure (psi)
3	3	3		

Pipe Reciprocated?	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated?	Pipe RPM (rpm)
No			No	

Tagged Depth (ft, KB)	Tag Method	Depth Plug Drilled Out To (ft, KB)	Drill Out Diameter (in)	Drill Out Date

Cement Volume Return (bbl)	Volume Lost (bbl)	Volume Squeezed in to Formation (bbl)

Tail

Fluid Type	Fluid Description	Amount (sacks)	Class	Objective
Tail	CLASS G CEMENT	375	Class G	Cement Surface

Estimated Top (ft, KB)	Estimated Bottom Depth (ft, KB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Mix H20 Ratio (gal/sack)
30.0	540.0			

Free Water (%)	Density (lb/gal)	Volume Pumped (bbl)	Thickening Time (hr)	1st Compressive Strength (psi)

Cement Fluid Additives

Add	Type	Conc	Conc Unit	Amount Units
FLOCELE	LCM			

Leak Off and Formation Integrity Tests

Mud Data

Date	Type	Density (lb/gal)	Vis (s/qt)	PV Override (cP)	YP OR (lbf/100ft²)	Gel (10s) (lbf/100...	Gel (10m) (lbf/100...

QEP Energy Company

QEP Energy Cement

PRODUCTION CASING CEMENT

Well Name: RW 34-14AGR

API	Surface Legal Location	Field Name	County	State	Well Configuration Type
43-047-53439	S14-T7S-R22E	RED WASH	UINTAH	UTAH	Vertical

Unique Well ID	Ground Elevation (ft)	Casing Flange Elevation (ft)	Current KB to GL (ft)	KB to CF (ft)	Spud Date	Dry Hole TD Date
UT101881	5,201.1	5,201.10	30.00	30.00	5/30/2013 07:00	6/15/2013 06:00

PRODUCTION CASING CEMENT, Casing, 6/14/2013 17:30

Type	Cementing Start Date	Cementing End Date	Wellbore	String	OD (in)
Casing	6/14/2013	6/14/2013	Original Hole	PRODUCTION, 6,497.0ft, KB	5 1/2

Cementing Company	Evaluation Method	Cement Evaluation Results
Halliburton Energy Services		

Comment

1, 30.0-6,497.0ft, KB

Top Depth (ft, KB)	Bottom Depth (ft, KB)	Full Return?	Top Plug?	Bottom Plug?
30.0	6,497.0	No	Yes	No

Initial Pump Rate (bbl/min)	Final Pump Rate (bbl/min)	Avg Pump Rate (bbl/min)	Final Pump Pressure (psi)	Plug Bump Pressure (psi)
5	2	4	1,220.0	1,850.0

Pipe Reciprocated?	Reciprocation Stroke Length (ft)	Reciprocation Rate (spm)	Pipe Rotated?	Pipe RPM (rpm)
No			No	

Tagged Depth (ft, KB)	Tag Method	Depth Plug Drilled Out To (ft, KB)	Drill Out Diameter (in)	Drill Out Date

Cement Volume Return (bbl)	Volume Lost (bbl)	Volume Squeezed in to Formation (bbl)
0.0	87.0	

Lead

Fluid Type	Fluid Description	Amount (sacks)	Class	Objective
Lead		530	ECONOCEM	Cement Production

Estimated Top (ft, KB)	Estimated Bottom Depth (ft, KB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Mix H20 Ratio (gal/sack)
30.0	4,000.0	100.0	2.45	13.74

Free Water (%)	Density (lb/gal)	Volume Pumped (bbl)	Thickening Time (hr)	1st Compressive Strength (psi)
	11.50	231.3		

Cement Fluid Additives

Add	Type	Conc	Conc Unit	Amount Units

Tail

Fluid Type	Fluid Description	Amount (sacks)	Class	Objective
Tail		580	EXPANDACEM	

Estimated Top (ft, KB)	Estimated Bottom Depth (ft, KB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Mix H20 Ratio (gal/sack)
4,000.0	6,497.0	100.0	1.49	6.99

Free Water (%)	Density (lb/gal)	Volume Pumped (bbl)	Thickening Time (hr)	1st Compressive Strength (psi)
	13.50	153.9		

Cement Fluid Additives

Add	Type	Conc	Conc Unit	Amount Units

Displacement

Fluid Type	Fluid Description	Amount (sacks)	Class	Objective
Displacement		0	2% KCL WATER	

Estimated Top (ft, KB)	Estimated Bottom Depth (ft, KB)	Percent Excess Pumped (%)	Yield (ft³/sack)	Mix H20 Ratio (gal/sack)
0.0	6,497.0			

Free Water (%)	Density (lb/gal)	Volume Pumped (bbl)	Thickening Time (hr)	1st Compressive Strength (psi)
	10.00	149.0		

Cement Fluid Additives

Add	Type	Conc	Conc Unit	Amount Units

Leak Off and Formation Integrity Tests

Mud Data

Date	Type	Density (lb/gal)	Vis (s/qt)	PV Override (cP)	YP OR (lbf/100ft²)	Gel (10s) (lbf/100...	Gel (10m) (lbf/100...